



**Professional trajectory from initial qualification to the workplace:  
what do nutritional therapists do?**

**Alison Benbow and Sabra Ralph.**

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**Glossary:**

ASA	Advertising Standards Authority	<a href="http://www.asa.org.uk">http://www.asa.org.uk</a>
BANT	British Association of Applied Nutrition and Nutritional Therapy	<a href="http://bant.org.uk/">http://bant.org.uk/</a>
BCNH	British College of Nutrition and Health	<a href="http://www.bcnh.co.uk/">http://www.bcnh.co.uk/</a>
CNELM	Centre for Nutrition Education and Lifestyle Management	<a href="http://cnelm.co.uk/">http://cnelm.co.uk/</a>
CNHC	Complementary and Natural Health Care Council	<a href="http://www.cnhc.org.uk/">http://www.cnhc.org.uk/</a>
CNM	College of Naturopathic Medicine	<a href="http://www.naturopathy-uk.com/">http://www.naturopathy-uk.com/</a>
CNT	College Natural Therapy	
CC	Core Curriculum	<a href="http://www.nteducationcommission.org.uk/trainers-1_17_3240151082.pdf">http://www.nteducationcommission.org.uk/trainers-1_17_3240151082.pdf</a>
FNTP	Federation of Nutritional Therapy Practitioners	<a href="http://www.fntp.org.uk/">http://www.fntp.org.uk/</a>
ION	Institute Optimum Nutrition	<a href="http://www.ion.ac.uk/">http://www.ion.ac.uk/</a>
NCA	Northern College Acupuncture	<a href="http://chinese-medicine.co.uk/">http://chinese-medicine.co.uk/</a>
NNA	Naturopathic Nutrition Association	<a href="http://www.naturopathy-uk.com/courses-eu/courses-nutrition/">http://www.naturopathy-uk.com/courses-eu/courses-nutrition/</a>
NOS	National Occupational Standards	<a href="http://www.skillsforhealth.org.uk/standards/item/215-national-occupational-standards">http://www.skillsforhealth.org.uk/standards/item/215-national-occupational-standards</a>
NTC	Nutritional Therapy Council	
NTEC	Nutritional Therapy Education Commission	<a href="http://www.nteducationcommission.org.uk/">http://www.nteducationcommission.org.uk/</a>
PC	Plaskett College	
PSA	Professional Standards Authority	<a href="http://www.professionalstandards.org.uk/">http://www.professionalstandards.org.uk/</a>
PT	Premier Training	
QAA	The Quality Assurance Agency	<a href="http://www.qaa.ac.uk/en">http://www.qaa.ac.uk/en</a>
QCA	Qualifications and Curriculum Authority	<a href="http://www.qca.org.uk/">http://www.qca.org.uk/</a>
RC	Raworth College	
SQCA	Scottish Qualifications and Curriculum Authority	<a href="http://www.sqa.org.uk/">http://www.sqa.org.uk/</a>
UoW	University of Worcester	<a href="http://www.worcester.ac.uk/">http://www.worcester.ac.uk/</a>
UW	University of Westminster	<a href="https://www.westminster.ac.uk/">https://www.westminster.ac.uk/</a>
UWL	University of West London	<a href="http://www.uwl.ac.uk/">http://www.uwl.ac.uk/</a>

## Context

Nutritional therapy is an evidenced based complementary therapy, which since the mid-1980s has undergone a process of professional and educational development

The formation of the first professional body, the Nutrition Consultants Association (NCA) in 1986 was followed in 1992 by the Society for the Promotion of Nutritional Therapy. In 1997, The British Association of Nutritional Therapy (BANT) was formed and the Nutritional Therapy Council (NTC), that set common standards of education and training, followed this in 1999. As the profession developed it also held the register of qualified nutritional therapists. It was responsible for accrediting courses (BANT) and in 2014 the NTC became the Nutritional Therapy Education Commission (NTEC, 2014).

The first National Occupational Standards (NOS) for nutritional therapy were published in 2003 by the Qualifications and Curriculum Authority (QCA) and Scottish Qualifications and Curriculum Authority (SQCA) and were revised by Skills for Health in 2010 (SFH, 2010). The first Core Curriculum was published by the NTC in 2004, revised in 2007 and is currently under review with an interim version published in 2015 (NTEC, 2015). Training providers undergo the NTEC accreditation process to ensure their courses are compliant with the Core Curriculum and the National Occupational Standards. The continuing development of the Core Curriculum ensures the professionalism of the qualification and contributes to the successful post-qualification outcome of graduates

In 2008, BANT changed its name to The British Association of Applied Nutrition and Nutritional Therapy to reflect the scope of its members' work and the Complementary and Natural Health Care Council (CNHC) was launched as the UK regulator of complementary therapies (BANT, undated). The CNHC, by 2009, held the register of nutritional therapists and, from 2013, registration was made compulsory for all those practising. From 2006 a voluntary NTC registration scheme had been in place with registrants either entering from accredited courses or by the grand parenting process (Granger & Watkins, 2014). In 2015, the Professional Standards Authority (PSA) approved the CNHC register as an accredited register (PSA, 2015).

The suggested academic level for entry onto the register via the grand parenting process was proposed by NTEC to be level 5 (Granger & Watkins, 2014) and the current interim Core Curriculum suggests that, based on the Frameworks for Higher Education Qualifications (QAA, 2008) descriptors, the academic level should be level 4 and 5 as a minimum with clinical training at level 6.

NTEC remains responsible for the educational standards of the profession, ensuring adherence to a minimum set of training provider and practitioner standards (Granger & Watkins, 2014).

## Purpose

Nutritional therapists (NTs) are usually trained on a 'supply' basis: individuals elect to train as a result of positive personal experience with the discipline; as an adjunct to another profession, discipline or complementary therapy, for personal or professional development, or in response to the marketing of courses by training providers. There appears to be no clear understanding of the market for nutritional therapists and no identified professional pathway. Whilst courses tend to focus on individual clinic-based consultations, there are other opportunities in the workplace. A list



published by BANT, the primary professional body for this discipline, identified areas of work as diverse as journalism, corporate well-being, and teaching (BANT, 2014). Evidently, there is the requirement for greater understanding of employment opportunities and outcomes for NTs in order to ensure that professional education equips graduates with the skills to enter the workplace.

## Scope

Every year, the Higher Education Statistics Authority (HESA) collects data regarding the first destination of the previous year's graduates (Mok, 2006). Clarity regarding career trajectories, from initial placement to current role, enables the creation of an accurate professional profile. This understanding may contribute to the advancement of both educational policy and practice. Such research is vital for the development of education, extending the knowledge and understanding of those involved in educational activity, whether from the perspective of student, educator, policymaker, or the public (British Educational Research Association [BERA], 2011). Studies performed by Reid and Petocz (2004) and Reid, Nagarajan, and Dortins (2006) have indicated a strong association between students' perception of professional work and their experience of learning.

The HESA data do not extend to include graduates of NT courses, whether at degree or diploma level, and little is understood about post-initial qualification destinations within this profession.

There may be discrepancies between the training that students receive and that required of them by employers (Nyström, Dahlgren, & Dahlgren, 2008); intelligent development and considered preparation of training courses may minimise such discrepancies. Training providers have found student experiences to be of use in the preparation of courses (Hounsell et al., 2005) and understanding NT behaviour following initial qualification may foster an awareness of the market for NT services. Whether clinical practice, group or corporate settings, mentoring, or other role in which NTs may be engaged, enabling professional training to deliver the appropriate knowledge and skill set may maximise the graduate's ability to respond to the changing labour market.

The inclusion of those who leave the profession without, or with little experience of, practising allows an understanding of potential barriers to practise, which, with Core Curriculum development, may be resolved or better managed, enhancing outcomes for all types of student (Galanouli, Gardner, & Gallagher, 2011) and supporting the transition from training to workplace and beyond.

Given that the Core Curriculum for nutritional therapy is currently under review by NTEC, it is hoped that this research project will inform, at least in part, the outcome of this review. It is anticipated that the findings of this project will provide a robust foundation for the evolution of the Core Curriculum within the context of the current markets for NT, and that this baseline research will be continued to guide the development of the profession.

## **Aims and objectives**

The primary aim of this research is to understand the professional destinations of NTs post-initial training and subsequently. It is expected that the findings will provide a platform from which the Core Curriculum will develop, enabling an awareness of the needs and perceptions of the student, the graduate, and the educator. See Figure 1 (page 10) for project overview.

This aim is underpinned by several objectives:

To establish appropriateness of 'fit' between qualification and subsequent occupation, including the identification of perceived and actual deficits in knowledge provision;

To support the development of the Core Curriculum and ensure an evidence-based approach to professional training;

To clarify possible barriers to, or reasons for non-continuance of, practise,

To enhance the teaching: learning process for future NT students.

## **Methods and methodology**

### **Design**

The project was designed to consider all currently known aspects of NT including demographics, qualification, and practice and continuing professional development. The authors also hoped to attract responses from those not in practice.

### **Measures**

Data was obtained using an anonymous questionnaire hosted by a free online platform, Toluna Quick Surveys ([www.quicksurvey.com](http://www.quicksurvey.com)). The questionnaire was designed jointly by both researchers, with input from the University of Worcester, and was piloted and adjusted prior to full launch. The survey was promoted by database gatekeepers using electronic media in a process that explained the rationale and obtained informed consent. The questionnaire was fully launched in January 2015 and closed at the end of May 2015. To encourage the maximum number of responses the survey was promoted by all concerned on more than one occasion.

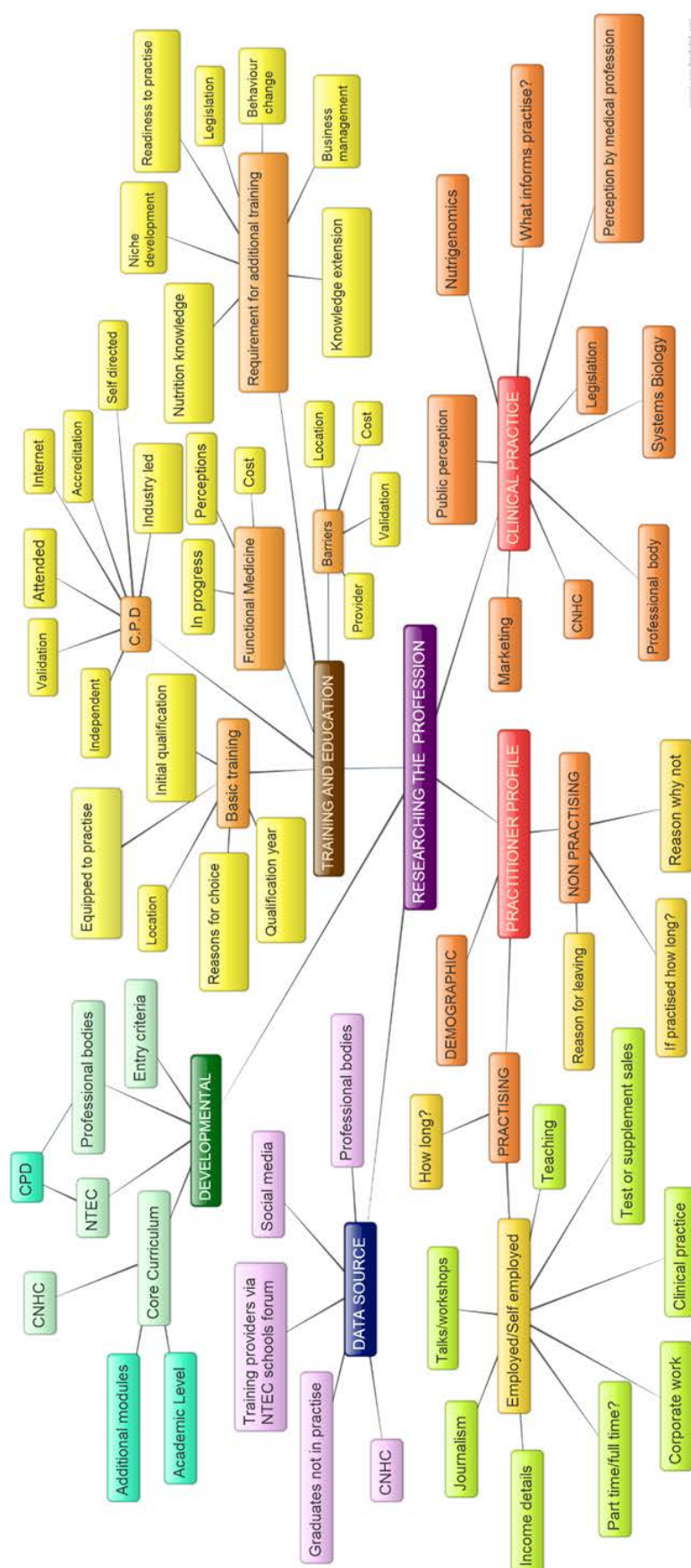


Figure 1 Project overview

## Participants

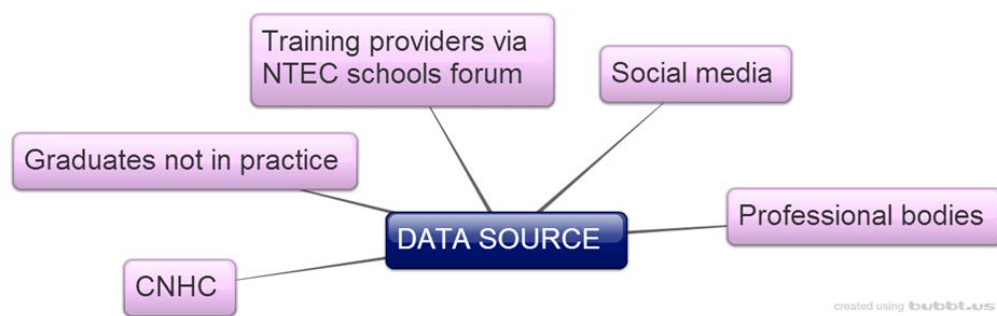


Figure 2 Project data source

The 428 participants, 94.9% female, were all qualified NTs or students of the discipline, recruited via the database of gatekeepers listed below; for overview of data sources see Figure 2.

### Nutritional Therapy professional bodies:

#### *The British Association for Applied Nutrition and Nutritional Therapy (BANT)*

This is the primary professional body for nutritional therapy. Discretionary membership is open to graduates and students. BANT publicised the survey several times in newsletters, e-blasts, on social media and at the 2015 Annual General Meeting.

#### *The Naturopathic Nutrition Association (NNA)*

The NNA participated at a later date by publicising the survey to members.

#### *Federation of Nutritional Therapy Practitioners (FNTP)*

The FNTP were invited to participate several times, however, they did not respond.

#### *Supplement Companies*

A selection of supplement companies agreed to promote the survey link to their registered practitioners.

### The NTEC Schools' Forum:

This body represents all training providers with the intention of sharing best practice in NT education. The training providers advised their alumni of the electronic link to the questionnaire via social media sites etc.

### The Complementary and Natural Healthcare Council (CNHC):

The UK Regulator for complementary therapies publicised the survey in a manner similar to that used by BANT.

Neither researcher had access to any graduate or student databases; each was reliant on the gatekeepers to promote and publicise the questionnaire.

### Ethical considerations

The research project received full ethical approval from the University of Worcester Institute of Health and Society Ethics Committee and was updated to include the non-UK responses (Appendix 2).

### Data capture and analyses

The data were extracted from the survey ([www.quicksurvey.com](http://www.quicksurvey.com)), as an SPSS file (IBM Statistics, v22). Statistical analysis was appropriate to the question asked and included descriptives,  $\chi^2$ , and, for the Likert scales, Kruskal-Wallis tests. The questions regarding additional training were validated using Cronbach's  $\alpha$ . Open-ended narrative responses were subjected to content analysis (Malterud, 2001). There is no missing data as a property of the survey tool is that all participants had to complete each question before continuing on to the next one. The survey attracted responses from 20 students and this data has been removed where appropriate.

## Results

### Practitioner Profile

The exploration of practitioner profile is represented in Figure 3.

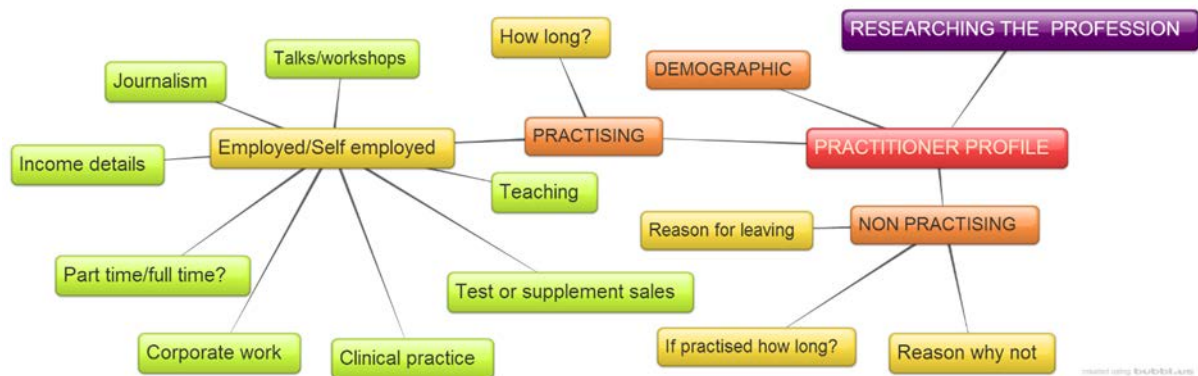


Figure 3 Exploring practitioner profile

The sample (including students  $n=20$ ) was mainly female ( $n = 406$ ; 94.9%), with 4.9% being male ( $n = 21$ ) and 0.2% ( $n = 1$ ) preferring not to say. The proportion remains the same without the students 95.1% female and 4.7% male. Whilst the sample (excluding students) was spread across the age range 20 – 70 years, the majority (90%) of respondents fell in the 31 – 60 years of age category; of those, the highest proportion was aged 41 – 50 (45.3%). Perhaps as may be expected with a sample whose majority fall into the 31 – 60 years of age category, many of the participants were married or living with a partner (Figure 4).

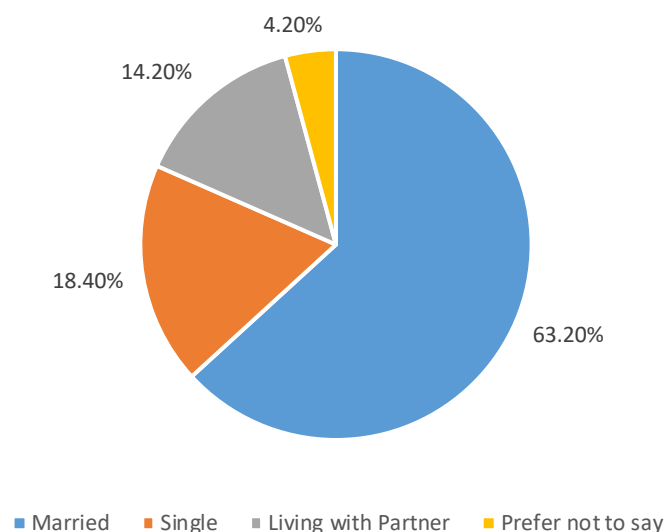


Figure 4 Marital status of participants

The respondents were asked to provide details about any children they might have; the sample was divided almost equally (Table 1). Most of the children fell into the youngest age group (Figure 5).

*Table 1: Number of respondents who have children.*

	Number of respondents	Percentage of sample
Yes	205	50.2
No	195	47.8
Prefer not to say	8	2

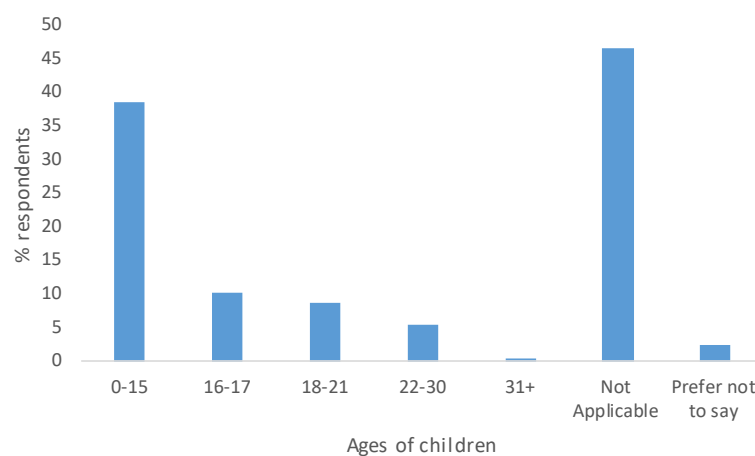


Figure 5 Ages of children

#### Men only:

There were only a small number of male respondents (n=19) (excluding students), possibly too few to be representative of the profession. In this sample they are primarily over the age of 30 years, the majority of men being in the 41 - 50 year old category (36.8%) (Figure 6).

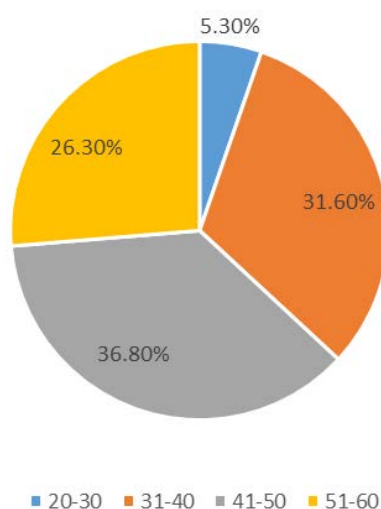


Figure 6 Age range of male participants

Perhaps reflective of the age composition of the sample, the majority of male respondents (73.7%) was either married or living with a partner (Figure 7).

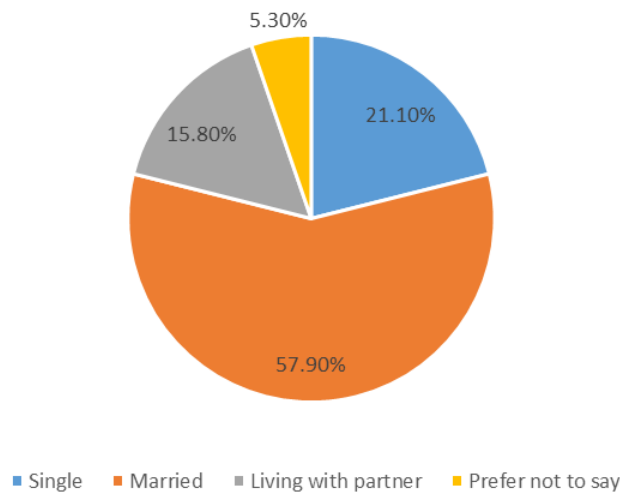


Figure 7 Marital status of male respondents

The majority (63.2%) does not have children living at home; 31.6% do have children at home, while 5.3% preferred not to say.

Of the small number of male respondents, 57.9% were self-employed; the remainder were employed (15.8%) across various disciplines. Of the 'employed' respondents, 20% were in combined nutritional therapy and business roles; 16% were employed in nutritional therapy, while 5% work in 'other' areas and the remainder declared the question was not applicable. The majority of men (52.6%) initially chose to train in nutritional therapy in order to work in clinical practice; this mirrors the number in clinical practice. Others (15.8%) chose to train as an adjunct to another modality with 26.5% studying for personal interest. This suggests that some of those initially choosing to train to become clinicians may have broadened their clinical offering or transitioned into other areas of work. The number of men electing to train in nutritional therapy has been increasing slowly (Figure 8) but remains considerably lower than the number of women, however this sample maybe too small to draw conclusions.

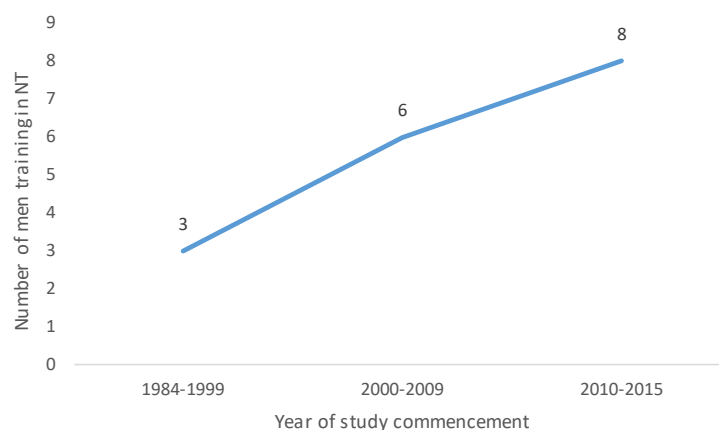


Figure 8 Men electing to train in nutritional therapy



An analysis of the UK location and geographical spread of NTs (excluding students) indicated that the majority of the participants were based in England (85.5%) with 4.4% in Scotland, 1.5% in Wales and 1.0% in Northern Ireland. Further geographic analysis of practising participants by county revealed that most NTs are based in London and the southeast of England, with a higher density in areas where there are training providers (Figure 10).

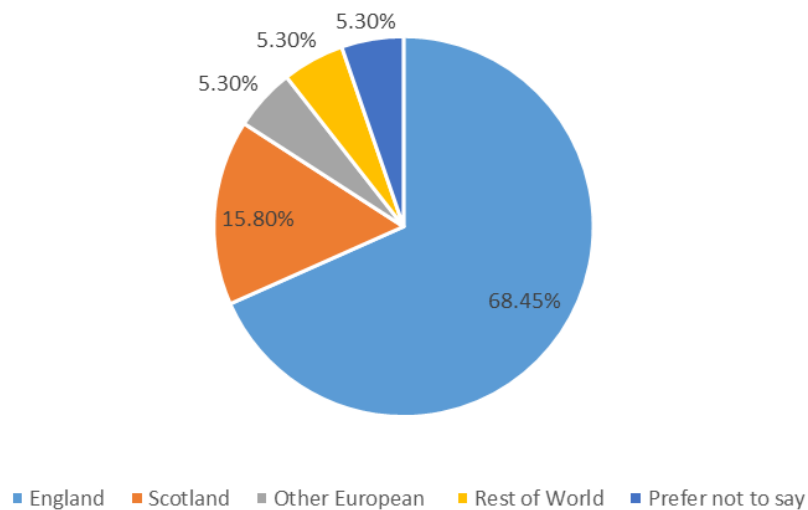


Figure 9 Geographical location of male respondents

As may be expected, the majority of male respondents live in England (Figure 9).

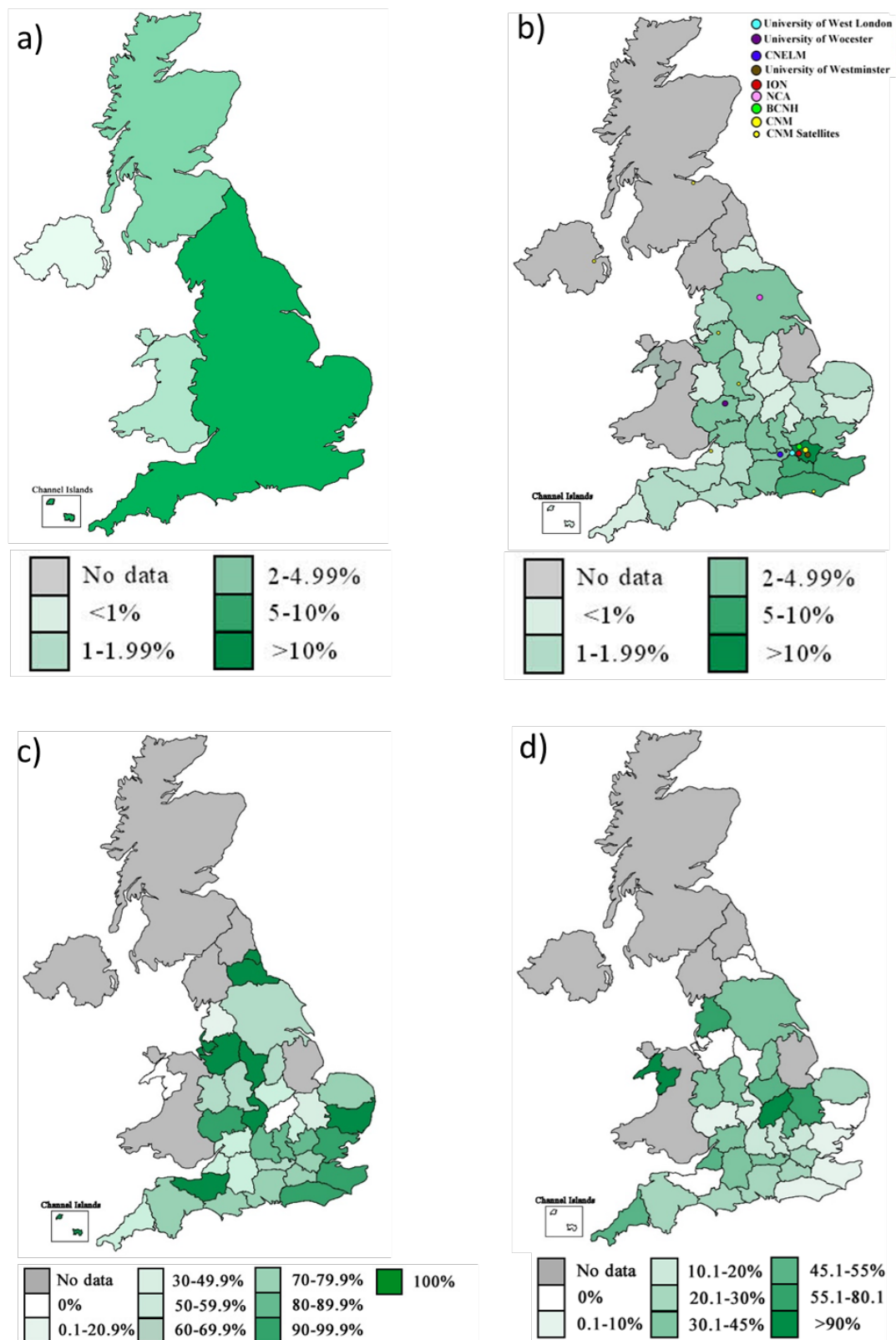


Figure 10 Maps indicating the UK distribution of nutritional therapists

a) UK distribution of NTs

c) Distribution of NTs by county

b) Distribution of practising NTs by county

d) Distribution of non-practising NTs by county

## Occupational profile of participants.

Data were gathered regarding current occupation of graduates (excluding the student participants). The majority (81.1%) currently practise; of those not in practice, 10.5 % had practised at some point, while 9.6% had never entered practice. Of the male participants 68.45% were currently in practice.

There was a gender-based difference in those therapists not in practice this was not significant ( $\chi^2(2) = 4.7, p = .095$ ).

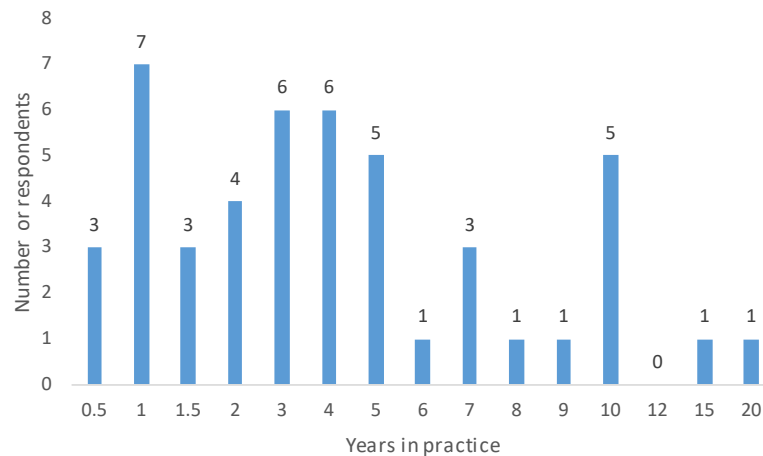


Figure 11 Number of years in practice for those who left practice

Of those who never practised (9.6%), 3.2% stated this was for personal reasons, 1.7% lack of confidence and the remainder were; in full time employment (1.2%), preparing to practice (0.6%) or they declared the question was not applicable. Those who entered and left ( $n=55$ ) remained in practice for a varying length of time from less than one year to over 20 (Figure 11). The reasons for entering then leaving clinical practice ranged from personal circumstances (8), inadequate training (5), lack of confidence (2), and insufficient earnings (14). Those who had reasons other than these cited them as family issues, alternative employment or moving on to further study. The primary reason cited however was “insufficient earnings” ( $n=55, 25.45\%$ ).

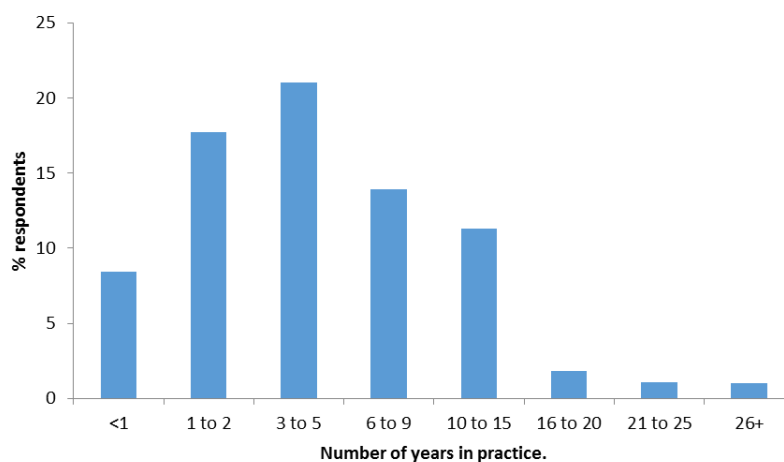


Figure 12 Number of years in practice for those currently practising

The majority of the participants (81.1%) currently practise. If the sample represents the profession, the profession is currently female-centric (female = 94.1%; male = 4.7%); there was no gender-based significance in currently practising ( $X^2(1) = 3.0, p = .083$ ). The number of years in practice ranges from less than 1 to over 26 and is seen in Figure 12.

Those who are practising are primarily self-employed 84.1%, 11.3% are employed; 1.5% preferred not to say. Of the 11.3% 'employed' respondents (Figure 13) the majority were employed as nutritional therapists; 'others' include specific roles where nutritional therapy may be offered as an adjunct (for example, to another CAM modality) or may inform the role (such as public health, journalism, or retail). Several respondents were practising nutritional therapy alongside another role, for example in technical services or academia. Of the male respondents ( $n=19$ ) 36.8% stated their primary income source was from clinical consultations

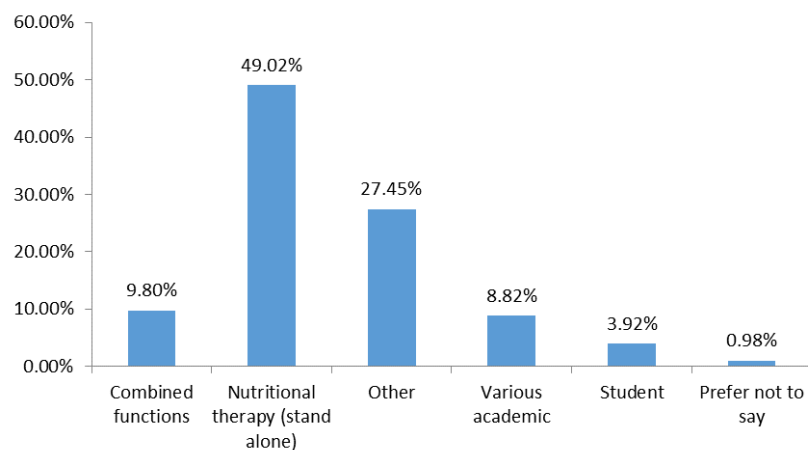


Figure 13 Occupational area of practising respondents

#### Income:

Of those respondents who divulged the income earned from nutritional therapy, the majority of the sample (30.4%) stated this was 'negligible'; 29.7% stated that nutritional therapy provided their primary income with 27.7% stating that it was a secondary income stream. Whilst less men than women (men: 31.6%; women: 33.14%) earned a primary income from nutritional therapy. As can be seen from Figure 14 there is little difference between primary (29.7%) or secondary income (27.7%).

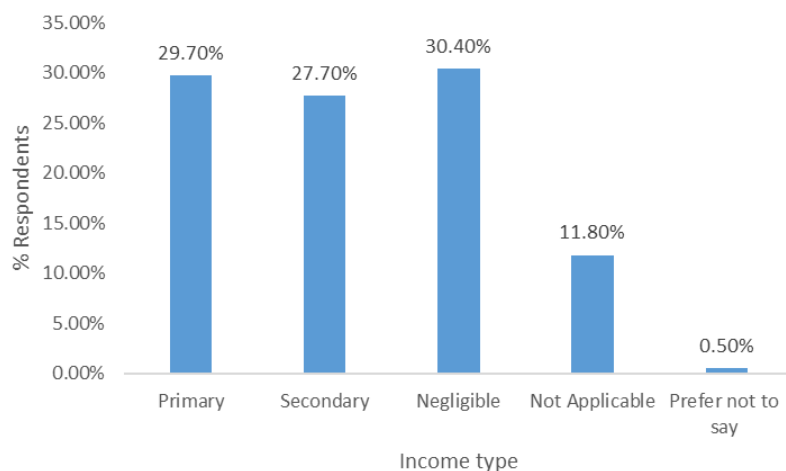


Figure 14 Income type of respondents

This income may come from a variety of sources as can be seen, however it appears that the main income stream is from clinical consultations at 54.7% of respondents and the least from the sale of laboratory tests at 0.7%. A small percentage (5.37% = 23 respondents) had a further range of income stream ranging from a portfolio of sources as in Figure 15 .

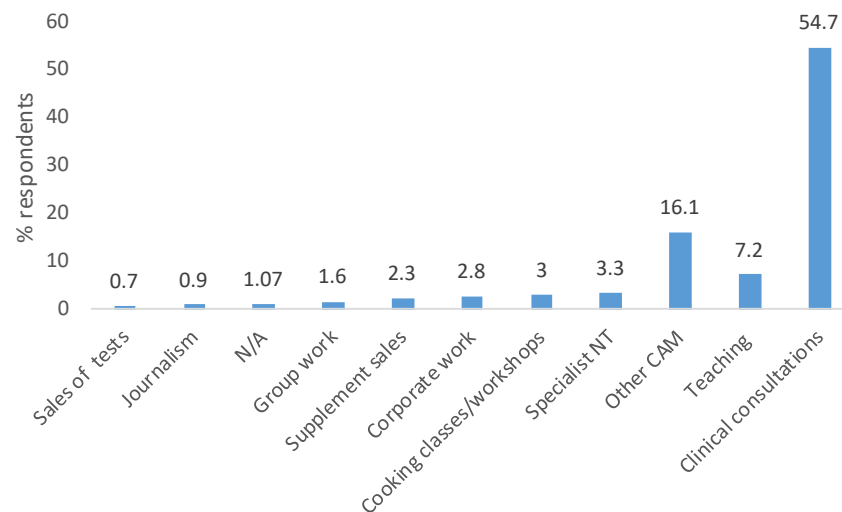


Figure 15 Income source

## Practitioner qualifications and training

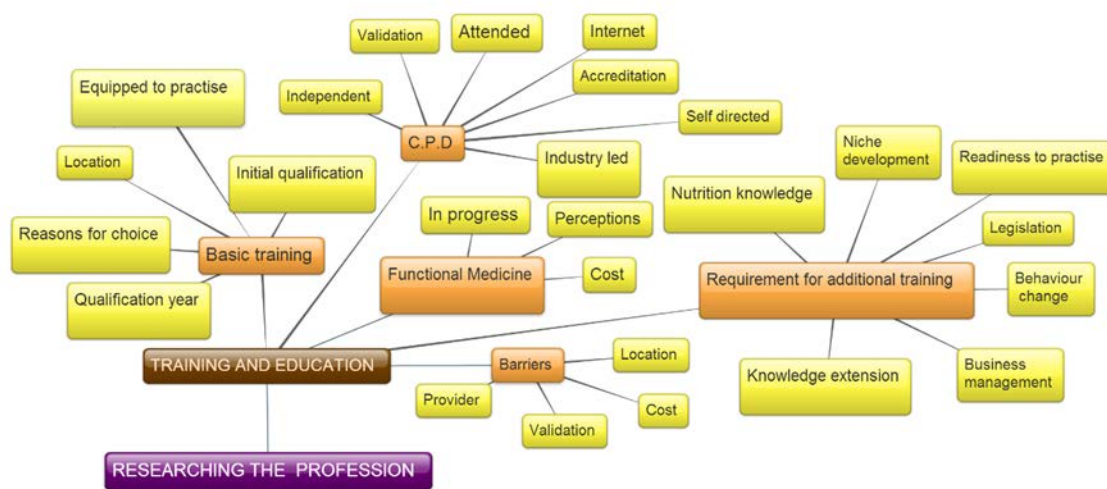


Figure 16 Practitioner qualifications and training overview

Practitioner education (past, current and ongoing) was included in the questionnaire as represented in Figure 16, Figure 17, Figure 18 and Figure 19 (see glossary for abbreviations). The student participants are represented here in Figure 18 as “other”.

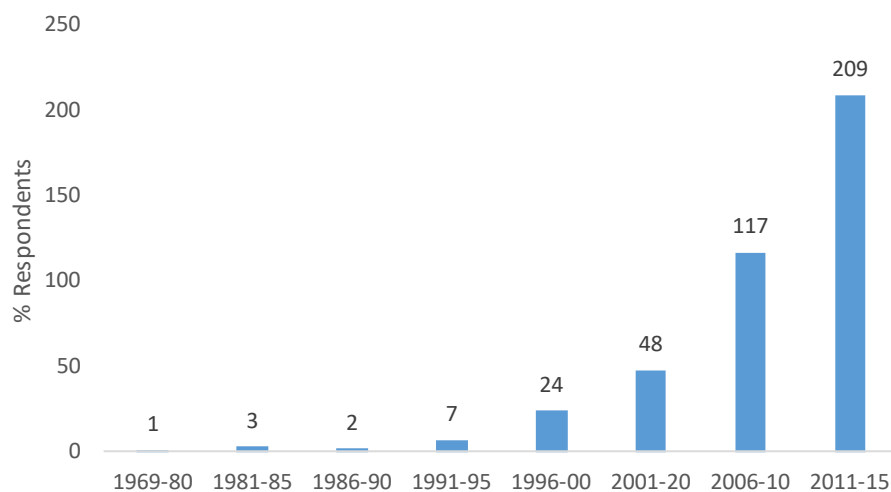


Figure 17 Year of qualification

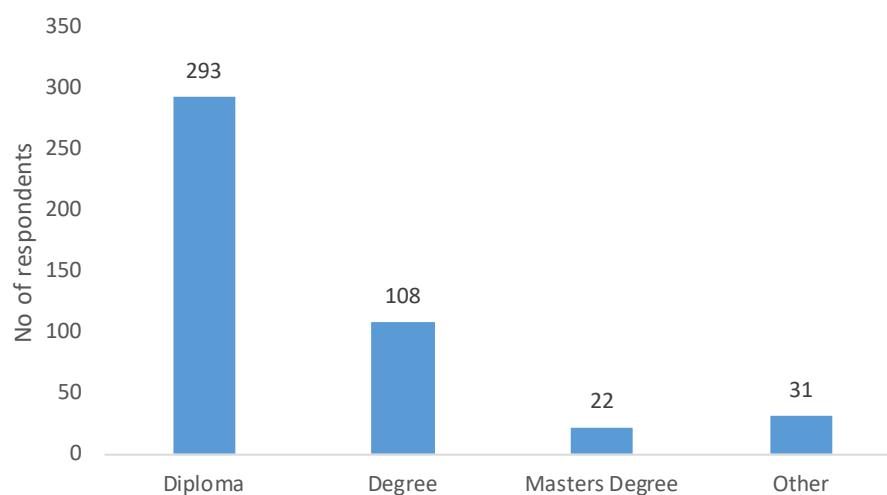


Figure 18 Qualification level

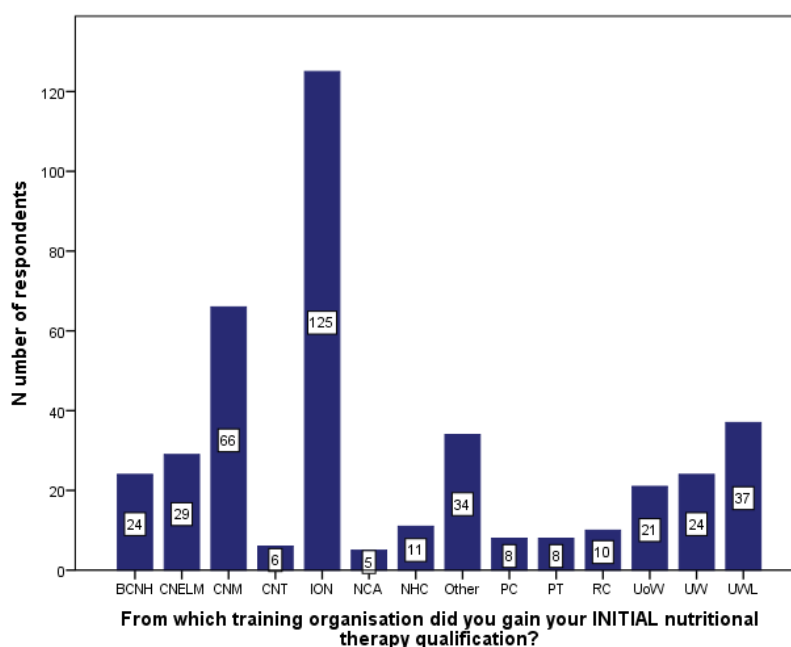


Figure 19 Colleges where qualifications gained (see glossary for abbreviations)

It can be seen that there is a clear increase in student number as the profession develops, with 209 out of the 428 respondents qualifying from 2011 – 2015. Initial qualifications of participants ranged from Diplomas (68.5%) to Masters Degrees (5.1%) with a small number (n=31) having another type of qualification. These ranged from Foundation degrees (17) to those not yet qualified (7) with the remainder declaring the answer to this question was not applicable. Of the male respondents (n=19) 10.5% had a Masters Degree, 21.1% a Degree, and 52.6% a Diploma.

The percentage of participants within each qualification level indicated that 82% of those with a Diploma were practising; 71% practising respondents have a Foundation degree, 76% a Bachelors degree, and 55% a Masters degree. Furthermore, out of the participants who were practising, 67% had a Diploma, 3% had a Foundation degree, 25% had a Bachelors degree and 4% had a Masters degree (Figure 20).

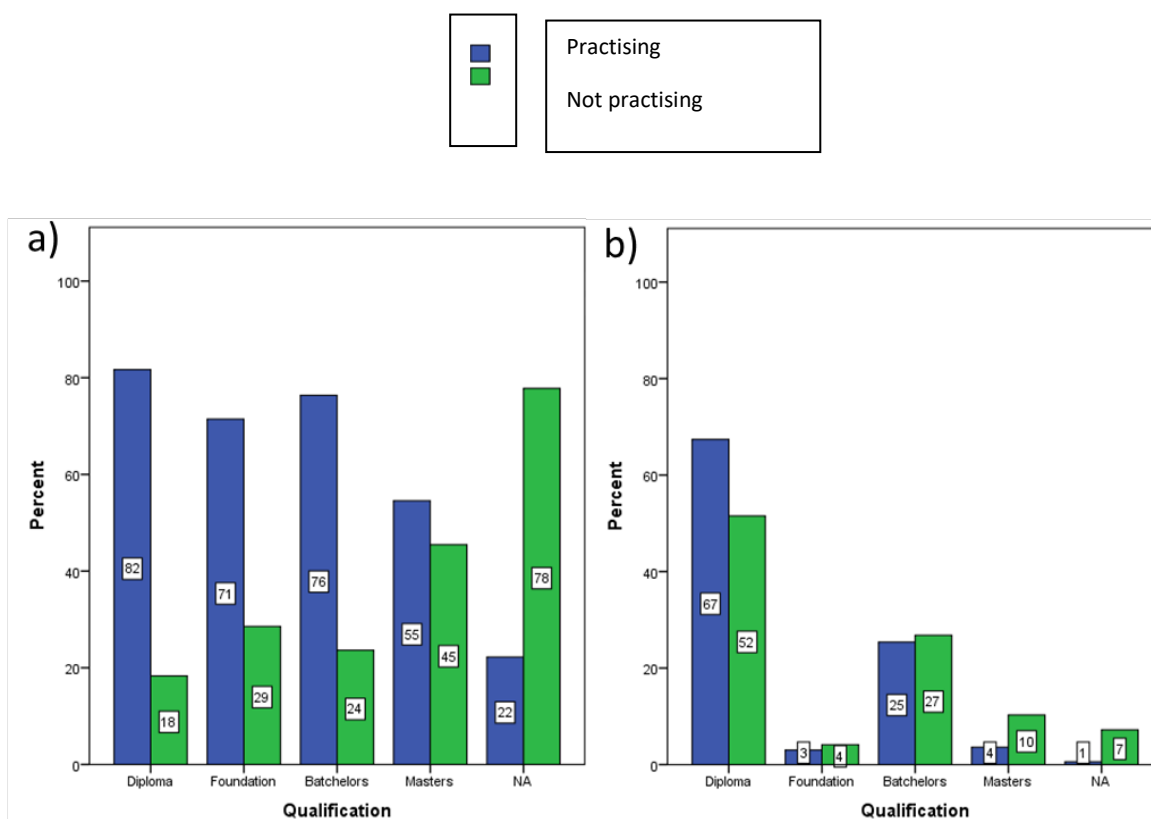


Figure 20 The number of participants who practise with each level of qualification

- a) The percentage of participants practising within each qualification level
- b) The percentage of participants practising between each qualification level

The participants were asked their primary reason for course choice (Figure 21). The majority 62.75% planned to work in clinical practice; 22.79% undertook a course for personal interest and approximately 2.45% aimed to improve employment opportunities or complement another modality.

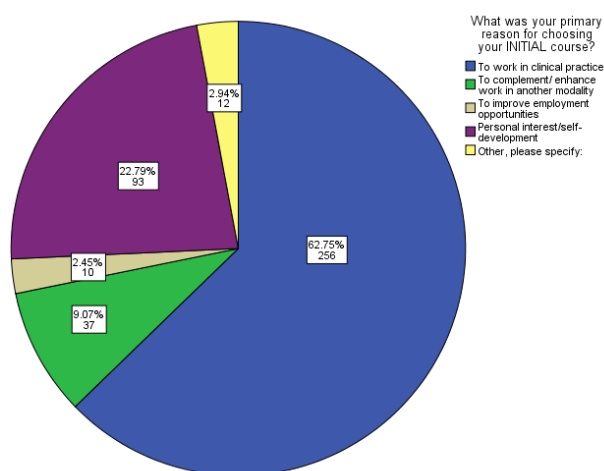


Figure 21 Reason for course choice



The participants were also asked if their initial qualification equipped them to practise and a majority of 80.9% suggested it did; 15.2 % said the contrary with 3.9% preferring not to say. There was a difference in response between men and women with 63% men suggesting they were equipped to practice and 81.7% women equipped to practice (Figure 22)

	Prefer not to say	No	Yes
Men		21.10%	63.20%
Women		3.10%	81.70%

Figure 22 Gender differences equipped to practice

Participants were asked to rate on a 1-10 scale (where 1 equals strongly agree and 10 equals strongly disagree) whether their current role was suited to their qualifications, and if they made use of the subject knowledge and skills gained on their initial training courses.

**a) If their current role was suited to someone with their qualification**

Of the 428 participants, 35.3% scored 1 [strongly agree], and 12.4% scored 10 [strongly disagree] (Figure 23). If the students are excluded from this question, then 36.0% strongly agree and 13.0% strongly disagree

**b) If they made use of the subject/discipline knowledge acquired on their initial training course**

Of the 428 participants, 34.6% strongly agreed and 15% strongly disagreed (Figure 24). If the students are excluded, then 35% strongly agreed and 15.4% strongly disagreed

**c) If they made use of the skills the developed on their initial training course**

Of the 428 participants, 32.7% strongly agreed whilst 12.9% strongly disagreed (Figure 25). If the students are excluded, then 33.3% strongly agree and 13.2% strongly disagree

The authors wondered whether participants' response may be influenced by level of qualification. To test the null hypothesis, that level of qualification does not affect how well the participants agreed with each of the three statements, a Kruskal-Wallis H test was carried out using 4 categories of qualification: Diploma, Foundation degree, Bachelors degree and Masters degree. Participants who had failed to give information about their level of qualification were excluded (See appendix 3 for supporting box and whisker plots). This test showed that between the four levels of qualification, there was no significant difference in how the participants answered the questions a) ( $X^2 = 2.15$ ,  $P = 0.541$ ), b) ( $X^2 = 5.351$ ,  $P = 0.148$ ) and c) ( $X^2 = 2.88$ ,  $P = 0.407$ ).

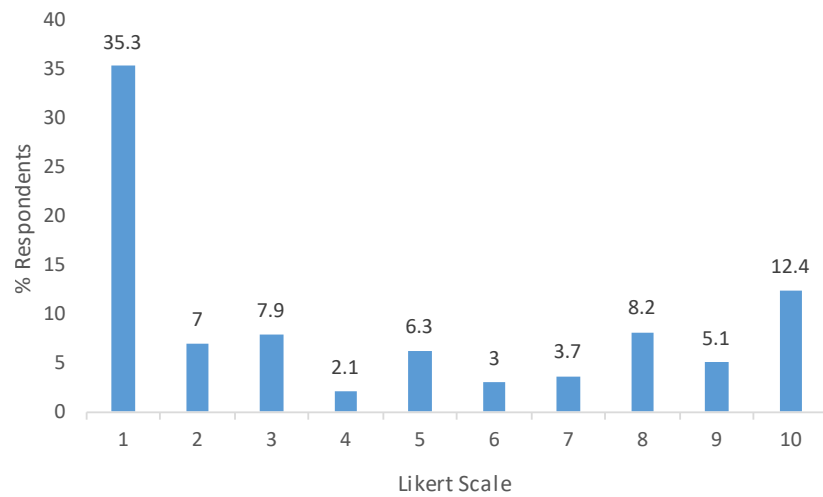


Figure 23 Likert scale current role suited to qualification

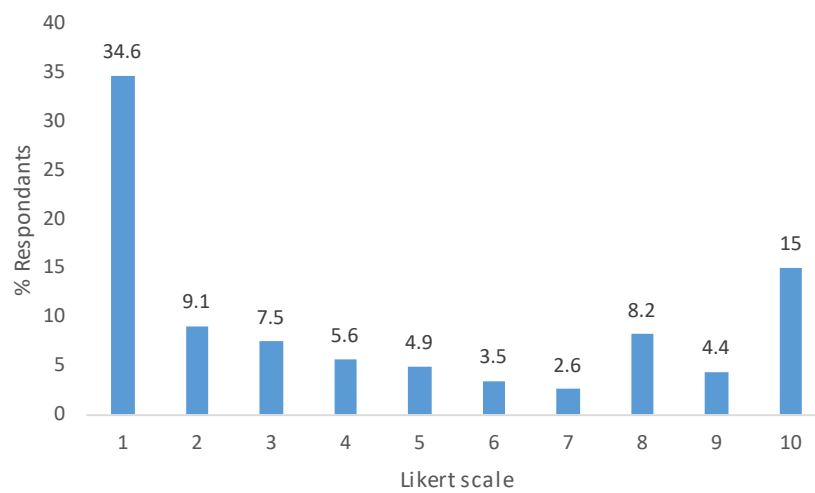


Figure 24 Likert scale use of subject knowledge

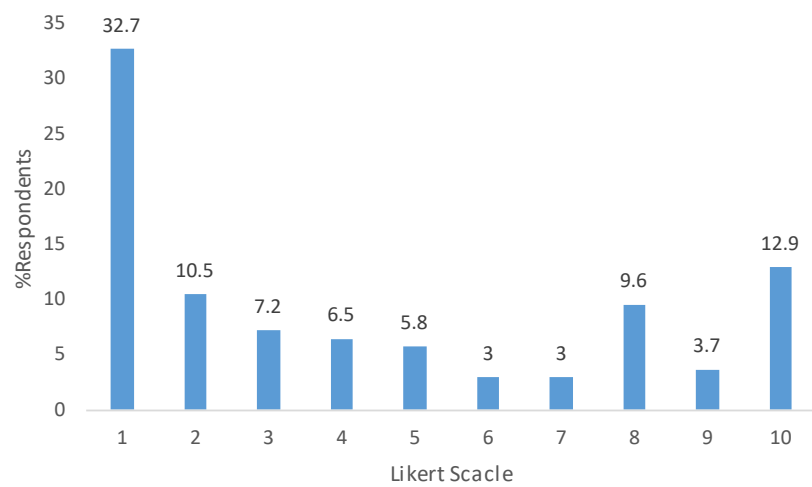


Figure 25 Likert Scale use of skills

## Additional training

## Additional training: Nutrition knowledge

The participants were asked about their need for further training; this scale was assessed for reliability (Cronbach's  $\alpha$  .86, 'very good'). There was no significant association between gender and additional training requirement in nutrition knowledge (Figure 26). Of note are 'interpreting medical tests' (40.19% required further training), 'interpreting functional tests' (44.86% required additional training), and 'developing nutritional strategies following testing' (25% required more training).

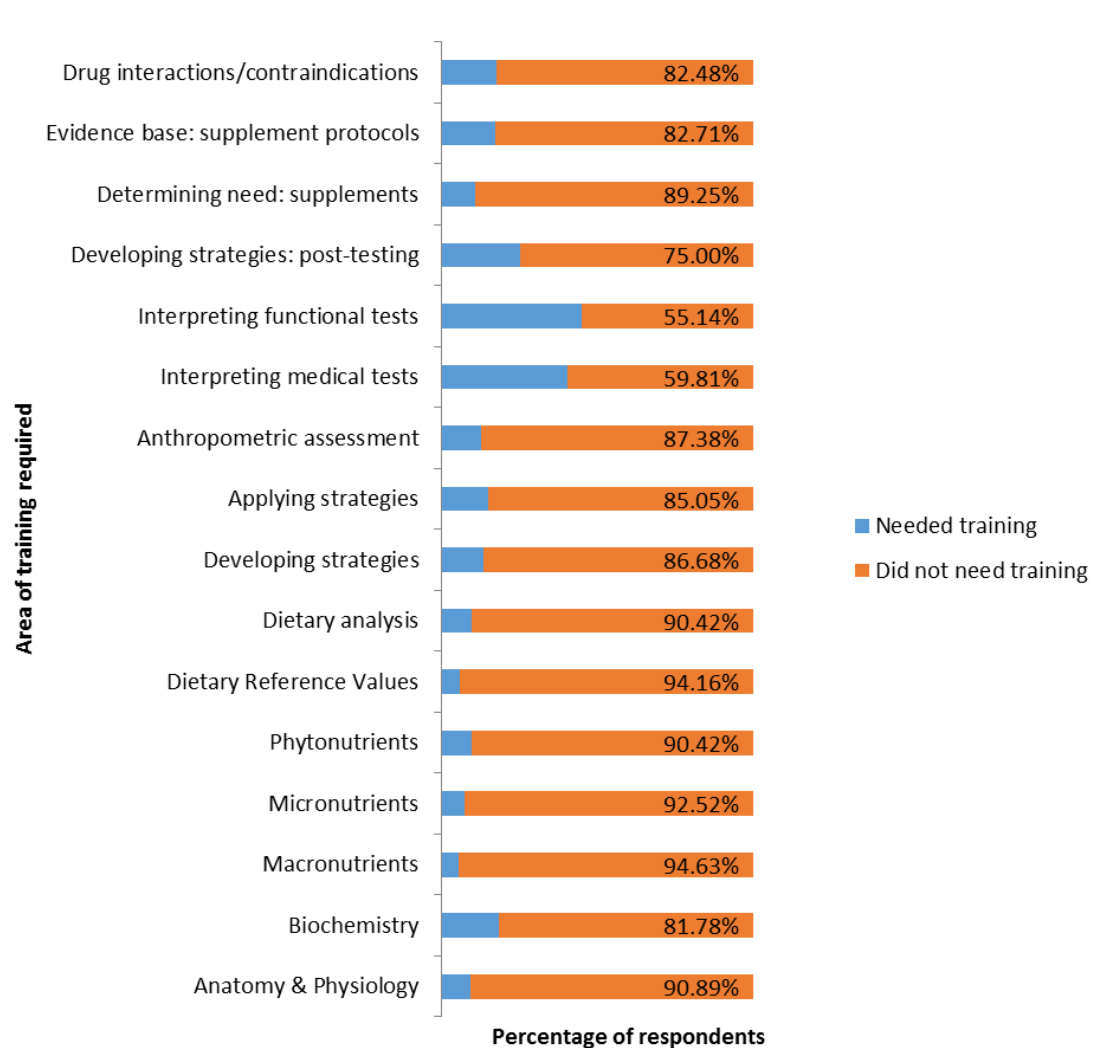


Figure 26 Perceived requirement for additional nutrition training

## Additional training: Health behaviour change.

Figure 27 illustrates the proportion of respondents' requirement for additional training in aspects of health behaviour change; this section includes writing for publication, policy, and legislative awareness. The participants indicated that most of them have some requirement for further health behaviour training with the highest being the psychology of behaviour change (28.5%) followed by motivational skills (24.5%).

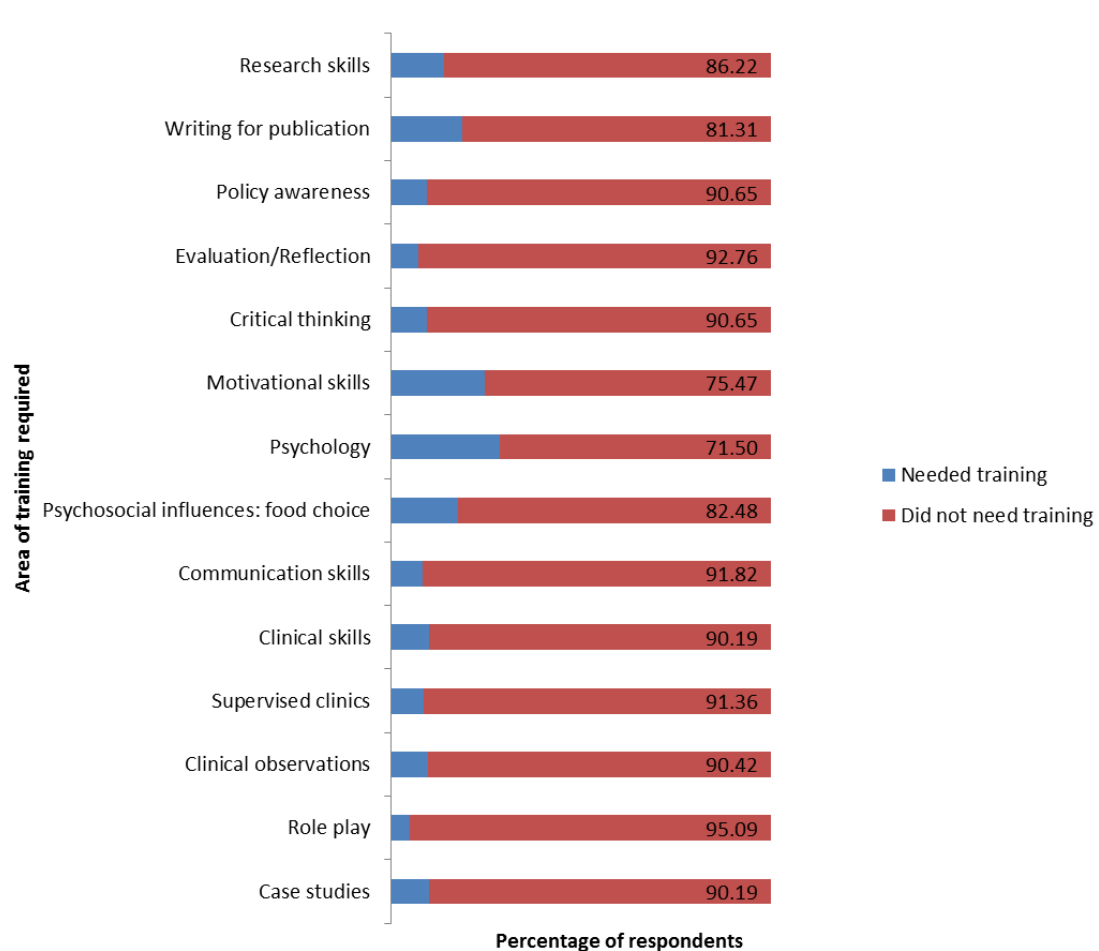


Figure 27 Perceived requirement for additional health behaviour training

### Additional training: Business management

The indications here are that there is a requirement for further business management training with 36.2 % for marketing, approximately 40% for social media, and around 20% for setting up in practice, niche development, and ASA/EU legislation,

There was no significant association between gender and perceived requirement for additional general business training ( $\chi^2(9) = 6.155, p = .724$ ) however there was a significant association between gender and understanding of ASA/EU legislation ( $\chi^2(1) = 7.448, p = <.01$ ) with men expressing a greater need than women. These findings suggest a general requirement for additional business management skills training irrespective of gender (Figure 28).

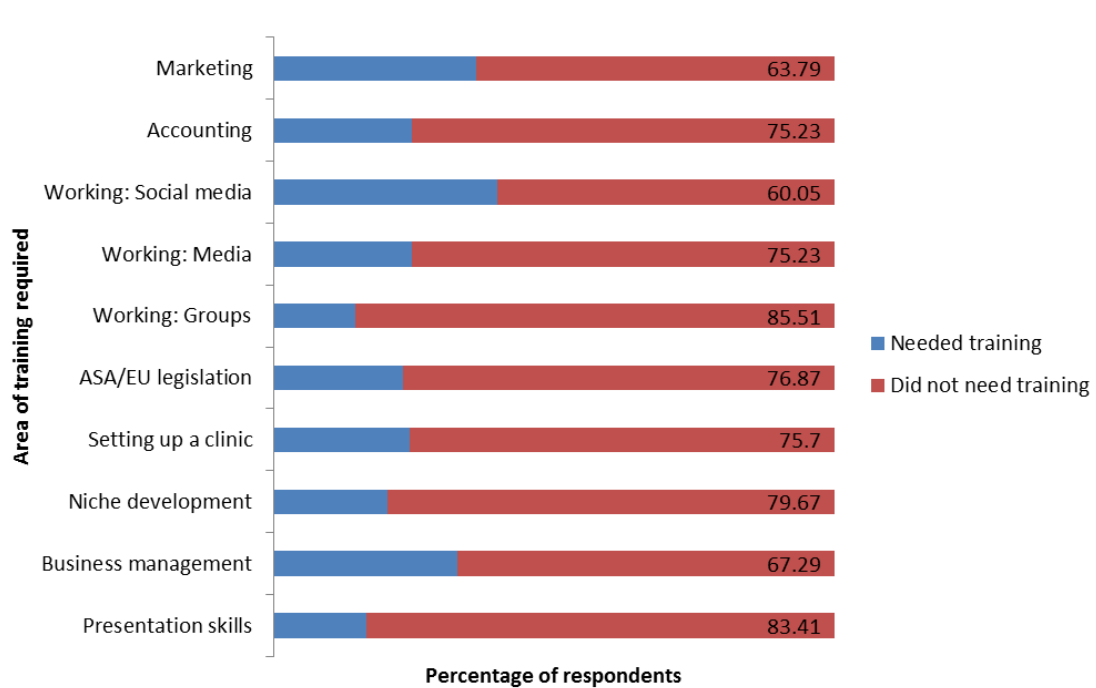


Figure 28 Perceived requirement for additional business management training

When asked if they had done any further formal training over half the respondents declared that this question was not applicable (n= 258); of the remainder a majority (n=28) had trained in other complementary therapies, including kinesiology, and yoga therapy. As shown in Figure 29 Further formal training , others had undertaken further training in NT (n=33), Functional Medicine (n=15), education (n=6) and behaviour change (n=11).

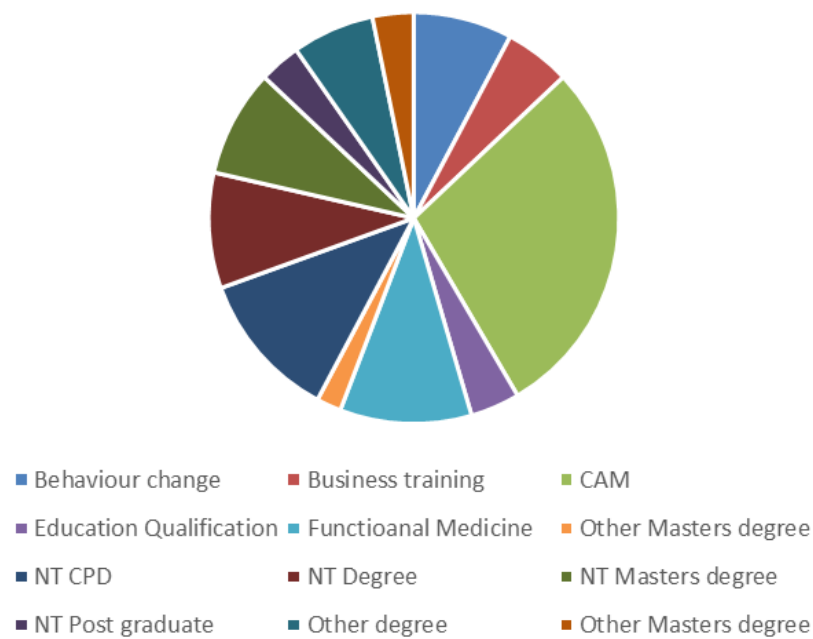


Figure 29 Further formal training

Clinical practice

Professional requirements

The survey explored aspects of practice considered by the authors to be relevant to the future development of the profession. Figure 30.

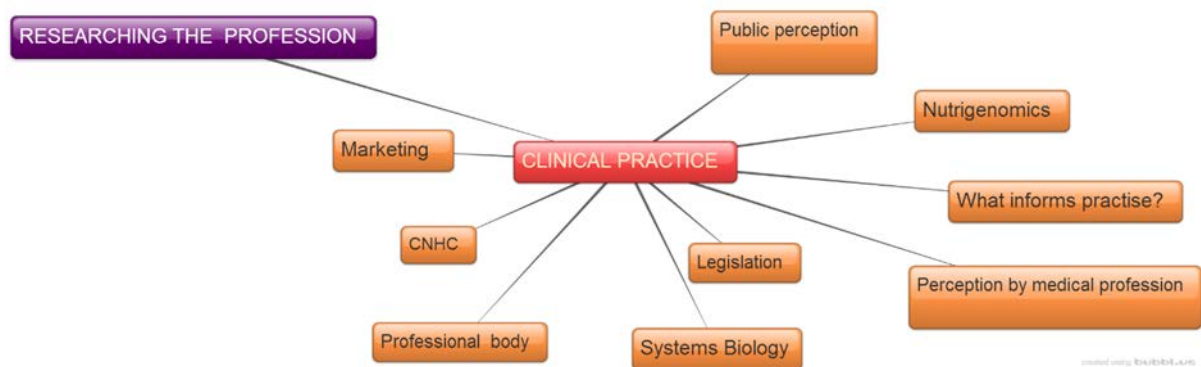


Figure 30 Professional influences on practise

The numbers of participants registered with CNHC and members of professional bodies is presented in in Figure 31 and Figure 32 A majority of 86.03% is registered with CNHC with 86% members of BANT; relatively small numbers of participants are members of other professional bodies.

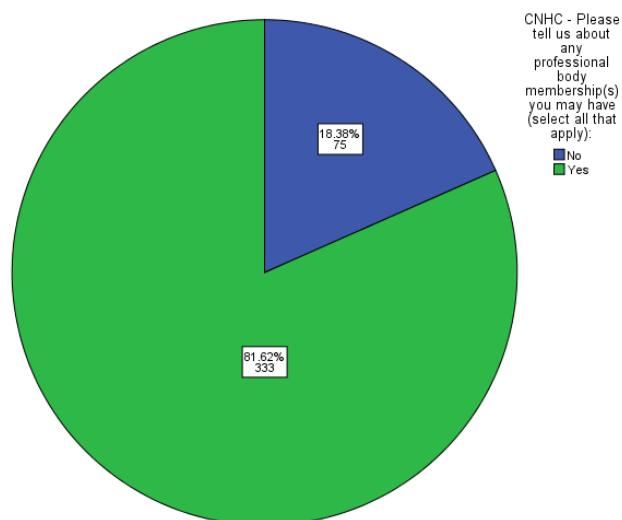


Figure 31 CNHC registration

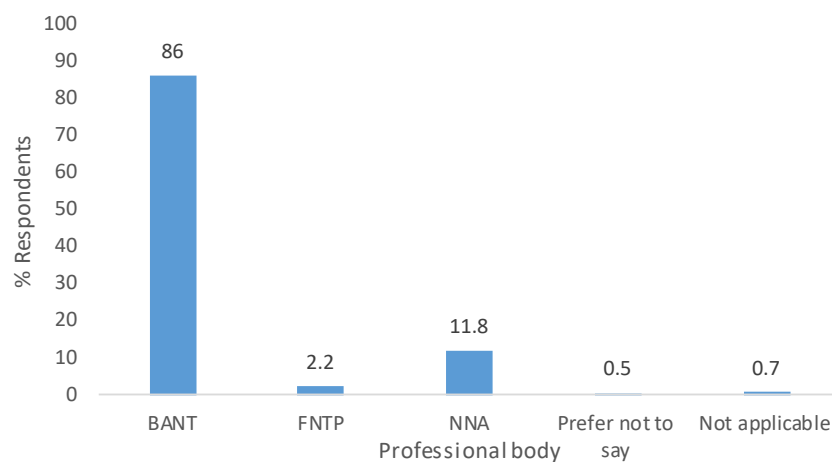


Figure 32 Professional Associations

### What informs clinical practice?

A variety of approaches were used by participants to inform their practice (Figure 33), with individual responses in Figure 34. In this sample, the majority use CPD (89.2%) and scientific journals (80.6%). Approximately two-thirds (67.2%) use industry events to support their practise with over half (55.9%) using internet forums. The individual responses (n=55) suggest a reliance on the industry to inform clinical practice (23.3%), and books considered appropriate by 23.3% of the respondents.

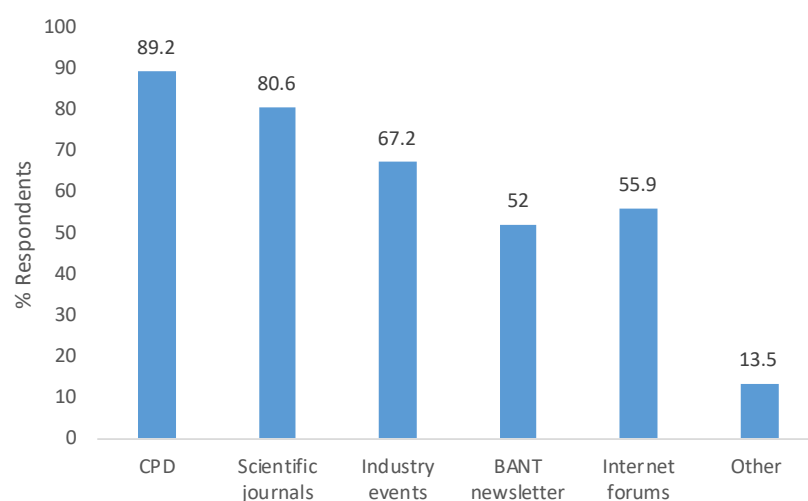


Figure 33 What informs clinical practise



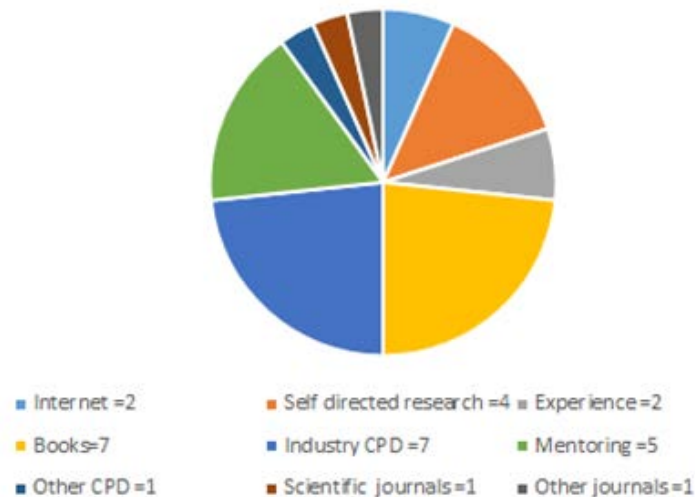


Figure 34 Individual responses to what informs clinical practise

### Systems biology

Systems Biology is a therapeutic approach which addresses the underlying causes of disease by shifting the focus from a disease centred to a client centred approach. Otherwise known as Functional Medicine, it empowers clients and practitioners towards health improvement (The Institute of Functional Medicine [IFM], 2015).

The participants were asked if they used a systems biology approach: 73% gave a positive response with 6.1% replying negatively; 11.3% were unsure and 8.1% declared it was either not applicable or preferred not to say. Of those that replied positively, 66.9% reported that they used a functional medicine approach, 6.1% said it was not functional medicine; 12.3% were unsure and 14.7% either declared this was not applicable or they preferred not to say.

The majority who used this approach declared that it informed their clinic decisions (73%) with the remainder replying negatively, 6.1% were unsure 11.3% or considered it not applicable or preferring not to say (9.6%). The participants were asked about further training and invited to tick all the responses that applied; for 31.4% respondents, training was in FM whilst 9.6% had followed another programme; 60% had undertaken self-directed research.

### Nutrigenomics

This is an evolving and currently controversial science, which investigates the potential influence of food on gene expression with the aim of reducing diet related diseases. (Christiana et al., 2015, Neeha & Priyamvadah, 2013).

The participants indicated that 88.0% were aware of nutrigenomics, with 1.7% indicating that they are on the Register of Nutrigenomic Counsellors. A minority of the sample (13.7%) suggested that they have sufficient knowledge to incorporate this into their practice, whilst 30.9% perceived interest amongst their client base (Figure 35).

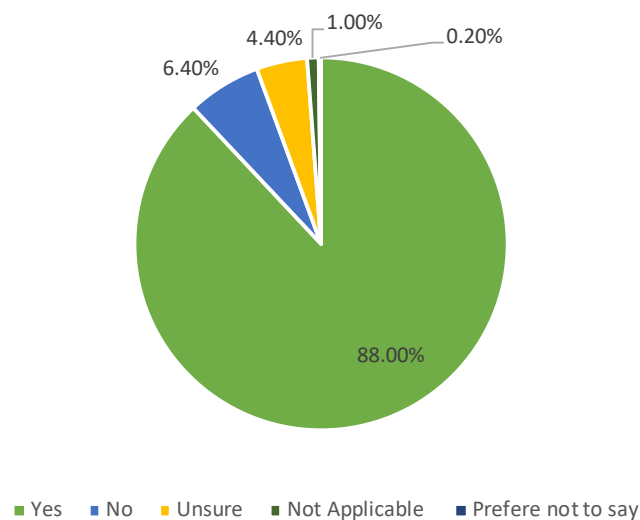


Figure 35 Respondent awareness of Nutrigenomics

### Men and Nutrigenomics

More men than women (men: 33.33%; women: 12.29%) consider their knowledge of nutrigenomics to be sufficient. Although there was a significant association between gender and belief in sufficiency of knowledge regarding this emerging area of personalised nutrition ( $X^2(3) = 18.00$ ,  $p = <.001$ ), the male sub-sample was too small to infer meaning comparison.

Practitioners were asked about their clients' interest in nutrigenomics, the majority of both genders believed that their clients had no interest in this field (men: 57.14%; women: 59.81%). Both genders have clients with some interest in nutrigenomics (men: 42.86%; women: 40.19%); although minor gender differences exist, again these were not significant ( $p = .585$ ).

### Perception of Nutritional Therapy by the public and the medical profession

The public perception of Nutritional therapy is considered by the participants to be better than it has been but with room for improvement (Figure 36 Figure 37). The main concern from those that responded individually to this question is focused around lack of understanding of the profession. The majority of participants have suggested the medical profession have a poor regard for the profession with some suggestion that this may be improving (Figure 38 and Figure 39)

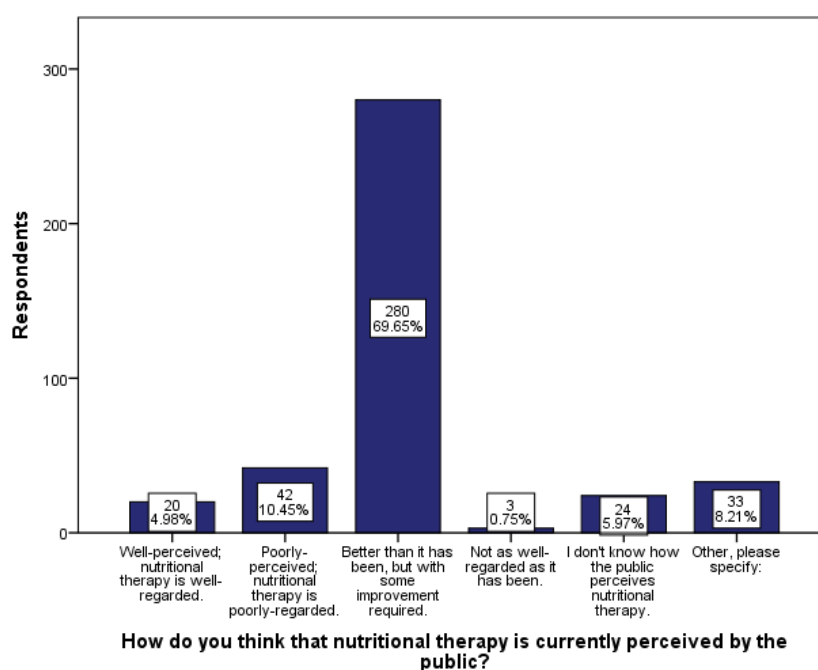


Figure 36 Public perception of nutritional therapy

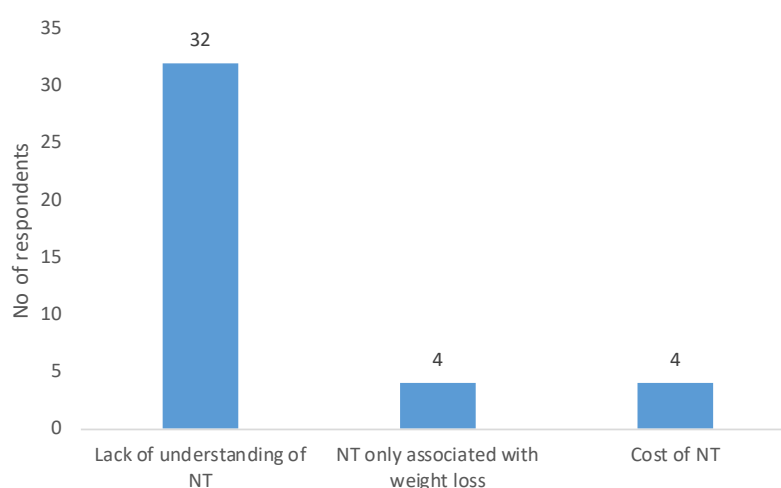


Figure 37 Individual responses to public perception

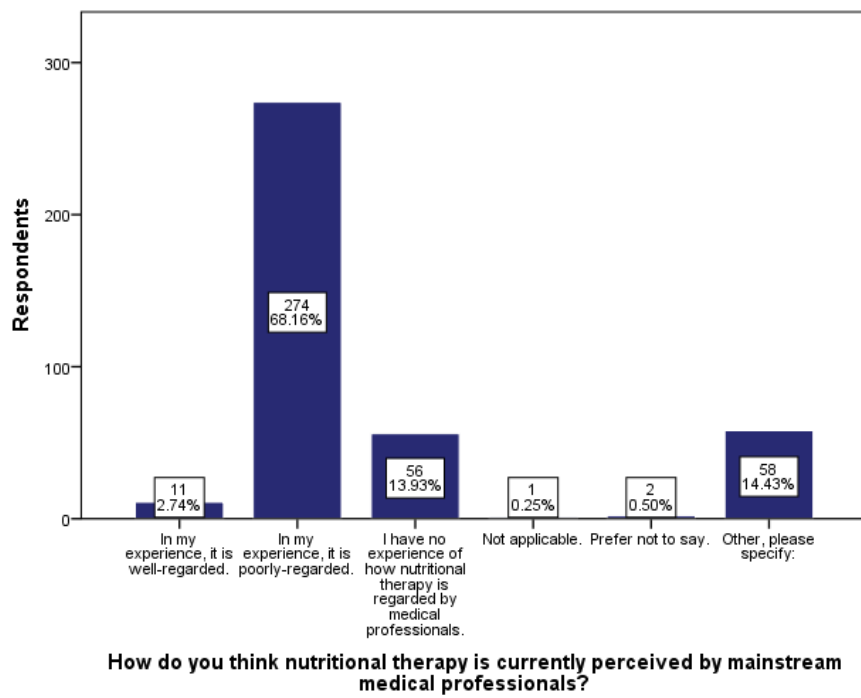


Figure 38 Medical profession perception

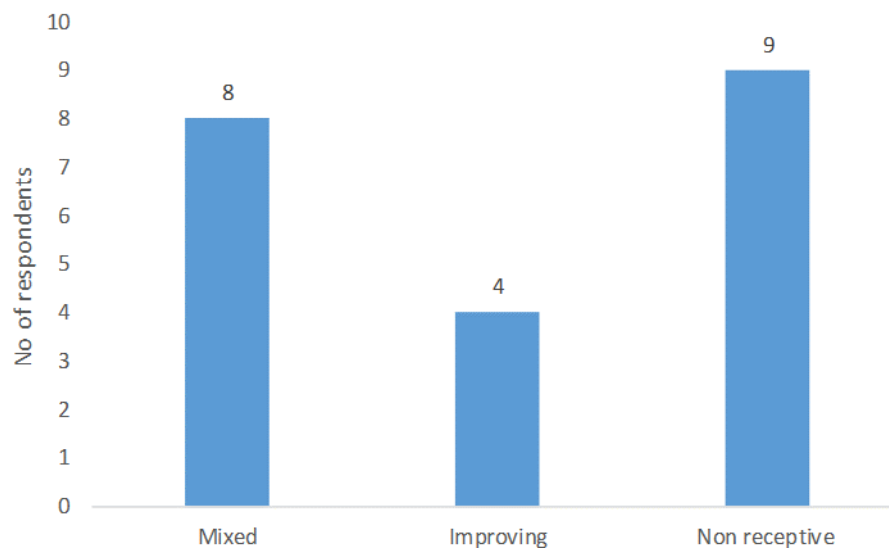


Figure 39 Individual responses to medical profession perspective

### Legislative framework

The comprehensive legislative framework around NT practice is complex and covers areas such as health claims, supplements, use of herbs, and marketing language. One example is the Nutrition and Health Claims Legislation (European Parliament and of the Council, 2006) which ensures that health claims made on foods are clear and evidence based. This is policed by the Advertising Standards Authority (ASA), the independent regulator for advertising across all media. The legislation protects the consumer and the practitioner and is an important aspect of professional practice; the survey endeavoured to establish practitioner awareness of this framework

The participants' response to the question around the need for legislation suggested that 29.85% understood the need, 28.61% understood but found it confusing, and 29.6% see the need but have some concerns about it; 4.9% have no opinion, Figure 40 .

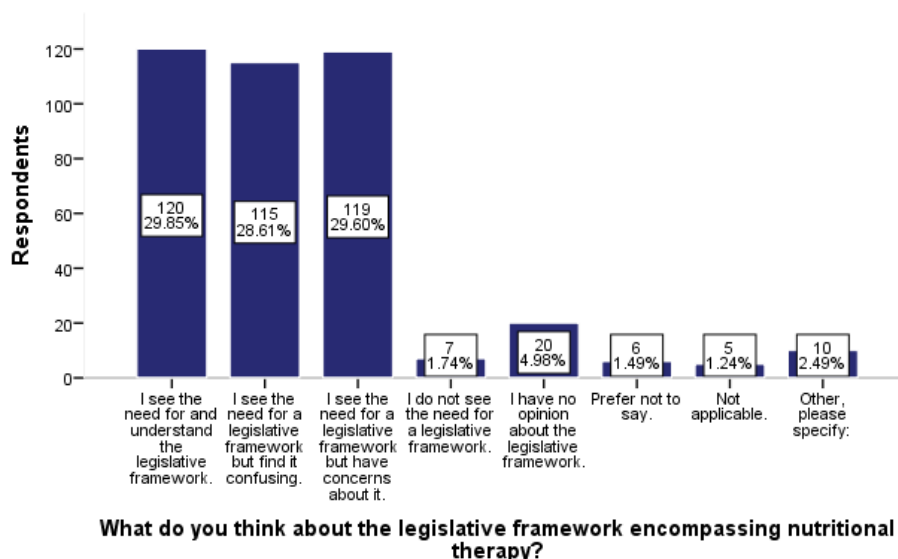


Figure 40 Perception of legislative framework

Of those participants who answered 'other', (n=10), three stated that the legislative framework was not clear, two stated that the legislative framework was 'designed to stifle the profession', three suggested a need for more clarity regarding the legislative framework, and one understood the need for the framework but was frustrated by it. One participant was not aware of the legislative framework.

### Marketing

A variety of marketing methods are used by the participants, ranging from word of mouth to social media; the participants were invited to choose all that applied to them and then to choose their most successful methods. The results summary is illustrated in Figure 41 Figure 42 and Figure 43

The results clearly indicated that word of mouth is considered the most successful method with the highest numbers choosing it as their first choice. Social media (including twitter) is used by 68.3% of the respondents, but when asked to rank their preferred method the indication is that this is amongst the least preferred methods. Posters and leaflets were used by 49% of the participants, but were never a first choice and professional networks were used by 47.9% of the group, but again not as a first choice.

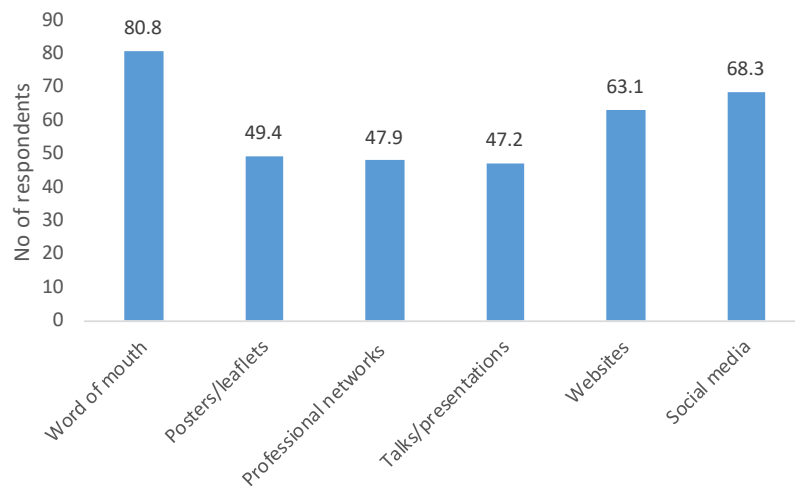


Figure 41 Marketing methods

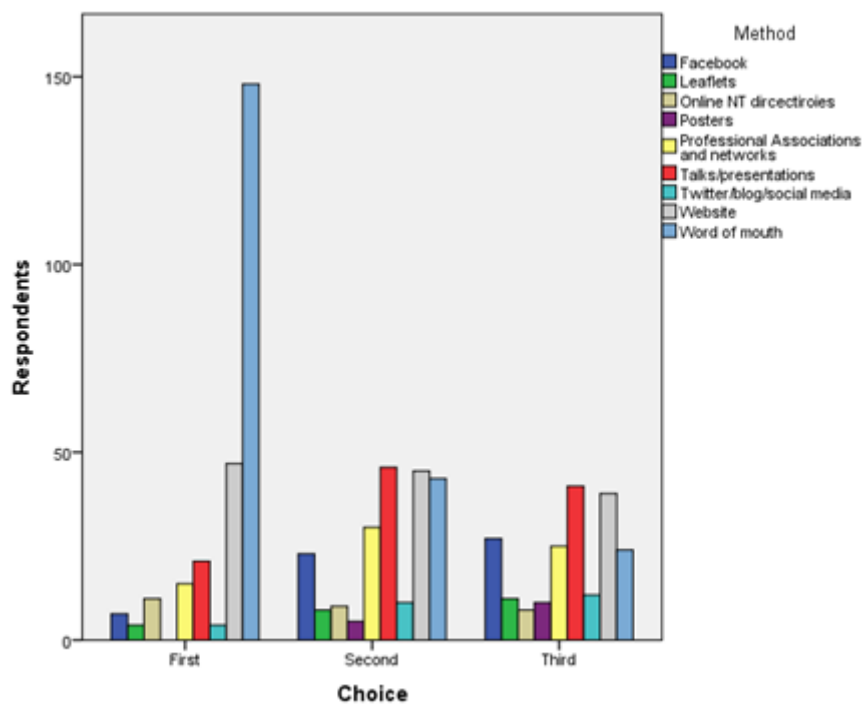


Figure 42 Preferred marketing methods by choice

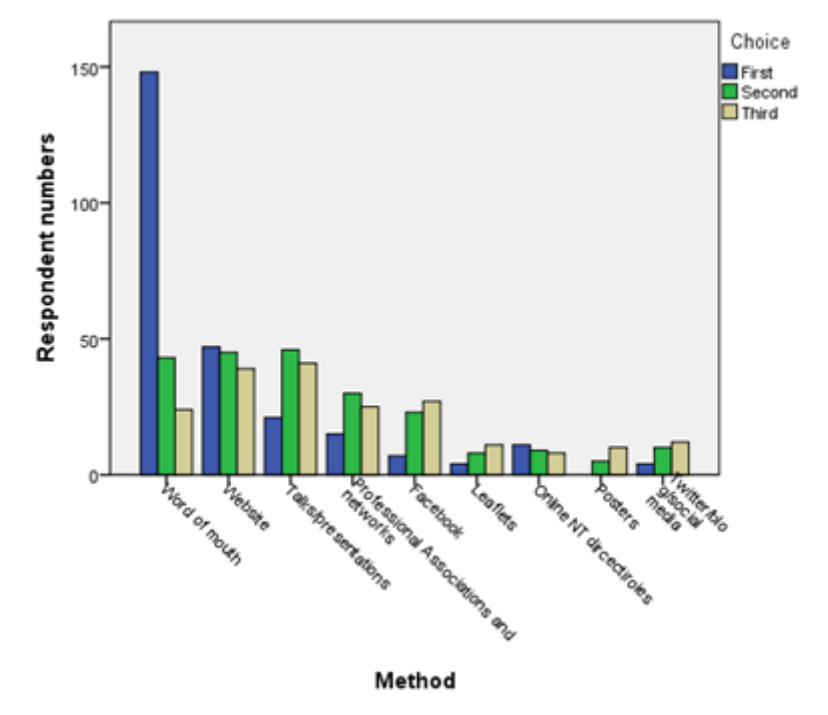


Figure 43 Preferred marketing methods by number

### Further information

The participants were invited to add any further information, which was themed according to their main issues Figure 44. Clearly, the main issues are the need for improved recognition for Nutritional Therapy by the medical profession and the public, and the requirement for protection of the title and statutory regulation. The requirement for further training before starting to practise was considered relevant by four respondents with 10 suggesting that the course level was inadequate.

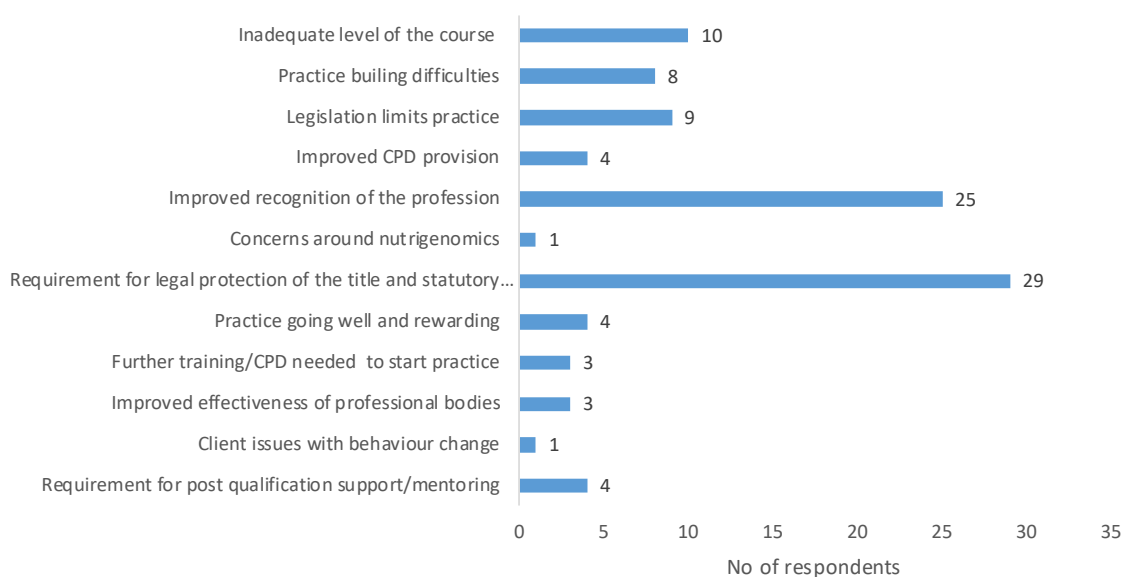


Figure 44 Further information





## Discussion and Recommendations

This initial exploration of professional trajectories of Nutritional Therapists intended to reveal not only the first destinations of qualified practitioners but their views on a range of factors concerning the training curriculum, earnings potential, and some contemporary and not uncontroversial issues such as nutrigenomics, the perception of nutritional therapy by the public and mainstream medical professionals, and the legislative framework. It is hoped that the results enable greater understanding of the 'fit' between qualification and opportunities, and barriers to practise, enabling development of the Core Curriculum (NTEC 2015) and identifying areas where support may be offered to practitioners in order to strengthen the profession.

It is not surprising that the majority of the sample was female. Complementary therapies, including nutritional therapy, which is traditionally classed as a complementary discipline, are naturally attractive to women, particularly the affluent and/or higher-educated (National Centre for Complementary and Integrative Health (NIH), 2007). Over recent decades more women have entered the workplace either voluntarily or out of necessity, with many establishing a career; nutritional therapy courses, as in many other modalities, have attracted mainly women, possibly because the need to immediately generate a primary income was less pressing than in more recent times or possibly as a result of targeted marketing. The data captured from the small sample of male participants was too small to make any meaningful comparisons.

Although the sample age range was 20 - 70 years old, 90% of the sample was over 31 years old; the majority was aged 41 -50 years, suggesting that, in this sample, NT attracts older people irrespective of gender. This is congruent with the idea of career changes, or re-training to re-enter the workplace after a career break or absence. In this sample, there was an age skew towards an older practitioner; this implies the potential for an ageing profession, which may have serious consequences for the profession's longevity. Training providers and professional bodies may benefit from considering targeting a younger student, both to encourage the development of a strong NT community but to ensure that the profession can thrive and flourish as older practitioners retire or leave the discipline.

Given the age of the sample it is not surprising that the majority (over 80%) was married or living with a partner; this further supports the idea of career change or re-entering the workplace. There was a roughly equal division between those with children and those without. Of those with children, 38.5% of the children was in the 0 - 15 age category; this may underlie part-time working or restricted earnings potential for some in the sample.

Although geographically scattered, the majority of participants was based in the south of England, particularly London and the south east. This may reflect the locations of training providers, the greater demand for nutritional therapy in those areas, or increased employment opportunities compared to elsewhere. Further research may benefit from exploring this in greater detail.

Employment status and income profile of the profession is of primary importance. The title 'profession' may be designed to separate or elevate the nutritional therapist's status away from that associated with other complementary health practitioners and towards that associated with other health professions encompassing medicine or nursing (such as doctors, dentists, dietitians, or nurses). It should be acknowledged that the UK has a state-funded health service; this determines that nutritional therapy is only available privately, requiring the majority of nutritional therapists to be self-employed, whereas the majority of healthcare professionals is in secure employment.

The massive increase in self-employed workers reached a high in 2014 with approximately one in seven of the working population self-employed (Parliament, 2015); in part, re-training is linked with economic downturns such as that of 2008 and this may be one factor contributing to the rise in course enrolment. However, the rise in self-employment figures pre-dates the economic downturn of 2008 (Parliament, 2015) as increasing numbers of people sought to take advantage of Government incentives, technological advancements, and alterations in welfare policies to undertake their own business. This may also be a factor in the geographic concentrations of Nutritional Therapists. According to Parliament (2015), there are considerably more people in self-employment in the south of England than in the north. This may be just one factor influencing the geographic spread of practitioners.

The rise in self-employment may be propelling the gradual increase in those undertaking training in nutritional therapy, particularly men. A significant association was noted in this sample between gender and likelihood of self-employment, with men being more likely than women to be self-employed; this was not reported however due to the considerable gender skew in the sample. In the absence of supporting evidence, the profile of nutrition, particularly sports and performance nutrition, appears to have heightened in recent years; nutritional therapy may be benefiting from a heightened profile of nutrition generally.

Many employed within the medical, nursing and allied healthcare professions are earning a primary or secondary income yet this study revealed that roughly one third of Nutritional Therapists earn a 'negligible' income from nutritional therapy. This may be influenced by employment status, with the self-employed generally earning on average £11,000 p.a; this is below average earnings for the employed (Parliament, 2015). Income may be influenced by the number of hours worked, work/life balance decisions, and other factors but, as one third of practitioners within this profession was not generating a primary or secondary income, a clearer understanding of the reasons for income limitation is urgently required.

The ability of practitioners to generate an income is of particular concern when consideration is given to the rapidly developing nature of the profession. The growth of the profession over the last 10 years has resulted in the development of the Core Curriculum (NTC 2003, 2007), National Occupational Standards (Skills for Health [SFH], 2007), accreditation and grand parenting, (Granger & Watkins, 2014), regulation (PSA, 2015) and the current re-evaluation of the Core Curriculum. The increase in the number of NTs training reflects this development with a steady rise in the number of men especially since 2009 (Figure 8). There is also an overall marked increase in the number training since 2010 (Figure 17). Although a positive development within the profession, future strategies may benefit from exploring how the profession can support the ability of all practitioners to generate an income, however it is worth noting here that NT as a secondary income/career may be a satisfactory situation for some of the participants.

Ensuring that initial, and subsequent, training provides a firm platform from which a practitioner can enter the workplace, accredited UK nutritional therapy training is currently offered at Diploma, Foundation/Bachelors, or Masters Degree level. At present, the Diploma is the most popular, followed by first degree and finally Masters Degree training. In this sample, the majority of respondents had undertaken Diploma level training at ION primarily and then with CNM. Several training providers are no longer on the accredited courses list, for example CNT. The authors urge caution in interpreting the results of this section: reliance on the gatekeepers to promote the survey naturally impacted participant recruitment from amongst the alumni of training providers that have closed or been removed from the accredited course listing; such participants may however have been reached via the professional bodies or Schools' Forum. What is clear is the popularity of

Diploma level courses. The academic level for Diploma courses is typically 5/6, whereas that for Bachelors degrees is 6 and for Masters is 7; the academic level is reflected in the entry requirements and so affects course accessibility and popularity. Masters degree programmes historically accommodate smaller numbers; there are currently only three providers offering qualifications at this level, further restricting the number of practitioners who may hold such degrees.

Discussions concerning the academic level of courses and the Core Curriculum may benefit from considering the reasons for course choice. For a discipline that trains clinical professionals, it is reassuring to note that the majority of the sample currently practise in some form, either self-employed or employed as NTs; whilst others combine NT with additional roles, income appears to be primarily earned from clinical consultations and this may be amongst the primary criteria for course selection. In this sample, those holding the lowest level of qualification, i.e. Diploma, were more likely to practise than those holding Foundation or Bachelors degrees; those with a Masters degree were the least likely to practise. This factor may be the initial reason for course choice: those intending to enter clinical practice may be more likely to undertake a Diploma course rather than a degree. Those who wish to complement another modality or seek employment in a related area may prefer a Masters degree. Personal interest and to improve employment opportunities were also given as reasons for studying and may influence course choice. It is reassuring that gender plays no significant part in deciding whether to practise or in the income generated by the profession. This suggests that, in this sample, there were equal opportunities to practise and earn an income from NT.

Consideration of the ability for practitioners to earn an income evidently requires understanding of 'fit' between Core Curriculum, training, and workplace requirements. It is very easy to dismiss as inadequate training provision under the Core Curriculum yet the results from this sample were encouraging. The majority considered that their initial training was fit for purpose; they considered that they completed their initial training with a qualification that was suited to their role, and that they have made use of the skills and knowledge gained during their training. For a minority, there were areas of training that may benefit from strengthening; these include the interpretation of medical and functional tests, as appears reflected in the 0.7% earnings generated by laboratory tests, and certain business skills, notably marketing and the use of social media. Looking at preferred marketing methods, whilst word of mouth remains the most popular and preferred approach to business generation, the second and third choices – websites and social media – indicate that such knowledge deficit has been filled, at least by some participants. It is, therefore, acknowledged that this practitioner-perceived need may originate from earlier training programmes that were delivered prior to the creation and development of the Core Curriculum; this may, however, benefit from review and, if necessary, strengthening in future training provision. Professional bodies may support their members' development by offering skills enhancement programmes or by signposting members to relevant training resources. Of note is that the response regarding suitability of 'fit' between qualification and workplace requirement was not linked to the qualification obtained; this suggests that the knowledge and skills covered in the NOS and the Core Curriculum, with a few exceptions, enable NTs to practise.

Any profession naturally experiences wastage; few data are available on the number of people qualifying but never entering their specific professions, however, in this sample, 9.6% of NTs have never practised. One third of the responses stated this was for personal reasons and other reasons included full time jobs and lack of confidence. To capture accurate data on numbers not entering the profession and reasons for not practising is a project for future development. The questions to be

addressed may include issues around the number of NT's trained and the projected employment prospects presented by training providers.

Perhaps of greater interest is the element of the sample that qualify, enter, and then leave clinical practice: given that the training programmes demand considerable investment (time and financial) and that they aim to create well-educated professionals, it is important to understand, and address, barriers to practise. Without addressing barriers to practise, training providers and professional bodies are not maximising outcomes for their graduates; more importantly, the profession cannot grow and develop into a strong community. That said, only 13.5% of this sample entered then left clinical practice; amongst that group, the primary consideration cited was insufficient earnings. In isolation this might reflect individual inability to generate an income yet, given that, over a third of the sample currently earns a 'negligible' income from NT, this suggests an issue affecting more than a few individuals. Little is known about the reasons for remaining in a profession in a non-income earning capacity: practitioners may be intending to practise or develop an income stream should personal or other considerations alter. There may be merit in exploring this in future research as, if all who are earning a 'negligible' income decide to leave the profession, there would be considerable contraction in the community. Whilst this may increase earnings potential for the remaining practitioners, the spread and strength of the community and the ability to offer NT may be adversely affected.

The decision regarding continuance of practice may, in part, depend on individual cost: benefit analyses. There are very real, and not inconsiderable, costs to remaining in practice, including professional registration, professional body membership, insurances, and CPD. There are also very clear concerns regarding the future of the profession and its direction. Such concerns were considered in the suite of questions regarding additional training needs, the legislative framework, nutrigenomics, and perceptions of the discipline both by members of the public and the medical community. The results, whilst pertinent to the development of the Core Curriculum, require consideration by training providers and bodies representing the interests of the profession as a whole.

One cost of remaining in practice is registration with, and membership of, professional bodies; such bodies ensure the professionalism of NT. Although compulsory for NTs to be registered with the CNHC, in this sample only 86.03% of participants confirmed their registration; this may benefit from further exploration and, if indicated, a compliance audit may be required. More practitioners were registered with professional bodies, with BANT being the most popular. Professional bodies and training providers have established an evidence-based approach to NT that underpins safe and effective clinical decisions; this may engender improved perception of the profession by the public and mainstream medical community. Evidence-based practice is a requirement reflected in the majority of respondents' clinical decisions. NTs employ a variety of approaches in meeting this requirement, with CPD being the most prevalent, and consulting the published literature a popular secondary option. Over half of the respondents use BANT newsletters, and internet forums. The use of internet forums presents a potential concern: they are generally unregulated, based on anecdotal experience, and may lead to non-evidence based decisions. Furthermore, some internet discussion fora are commercially funded by supplement companies; this may be interpreted as a conflict of interest, resulting in less than impartial guidance. Although overall NTs appear to be adopting a professional approach to practise, the continued reinforcement of this operational base by professional bodies and training providers can only contribute to improving the situation.

One area of discussion around strengthening professionalism has been a mentoring or supervision scheme. In this sample, there was a lack of interest or mention, with only five participants using it to

inform their clinical decision-making; an additional four noted it under 'other information'. Mentoring/supervision schemes feature in other professions that require reflective learning, for example the psychology fields. Such schemes require fee payment to the supervisor and a regular time investment. When over a third of NTs do not earn a primary or secondary income from the profession, such a cost may influence decisions regarding not only service uptake but continuance in the discipline.

CPD is the primary approach that NTs adopt to inform clinical practise. That successful completion of CPD is a vital element of professional development is acknowledged by the 30 hours compulsory requirement on practitioners registered with CNHC/BANT. Amongst this sample, it was evident that the majority of NTs are observing their CPD requirements. The development of stand-alone CPD modules may be one option in covering the 'knowledge gap' as perceived and identified by some of this sample. The CPD framework and requirement for NT has recently been investigated in a small, unpublished, study (Regan, 2015). The results indicated some ambivalence around CPD and its supervision as well as time restraints, cost implications and location; one concern was the evidence base of CPD events. Further research into CPD, its evidence-base, and accessibility (financial and geographic) may contribute positively to the development of the profession. Such research may enable the professional bodies and training providers to understand whether there may be benefit in offering impartial, well-researched and independent CPD using online, and thus readily and cost-effectively accessed, platforms. It should be noted here that some internet forums may be commercially funded by supplement companies.

A principle approach in therapeutic NT practice is systems biology; this has been incorporated into more recent training programmes and is a corner stone of Functional Medicine [FM] (IFM, 2015), one manifestation of systems biology that is usually delivered by CPD. It appears that the majority of practitioners adopt a systems biology approach (72.9%) of which 66.4% used FM; the majority of NTs (72.4%) use systems biology to inform their clinical decisions. Approximately one third of respondents had undertaken formal training in FM; over half of this sample had performed self-directed research or followed another, non-FM, programme. Not all practitioners were aware of this approach, and 13.3% were unsure if they used it. This may be considered in the development of the new curriculum as FM is not the only approach available. FM is a systems biology approach that was created in the United States for use by a medical profession and healthcare system that generally recognises and positively responds to an integrated, client- rather than disease- centred process; it has been promoted to and adopted by UK NTs who operate in a fundamentally different setting. It may be that this is a suitable juncture to consider the future direction of this approach in NT training.

Another, not uncontroversial area, is the emerging science of nutrigenomics; this involves the application of molecular tools to understand how a specific diet affects the individual and population groups (Sales, Pelegrini, & Goerch, 2014) and offers the potential for personalising nutrition. As such, it is attracting interest and attention in NT and this survey aimed to clarify the perception of this emerging field. The sample was approximately divided between those who perceive adequate knowledge of nutrigenomics; men appeared more confident in their knowledge than women. This may reflect that men are more comfortable with the type of subject matter, or more willing to engage in emerging fields, potentially to enhance their clinical offering. Roughly 40% of the sample, irrespective of gender, perceived client-interest in nutrigenomics; this may reflect the clinical location/client demographic (e.g. high net worth individuals, innovators/early adopters) or result from any promotional activity undertaken by the practitioner.

Irrespective of practitioner-perceived adequacy of knowledge or client-driven demand for nutrigenomics, the authors caution that a wider view be adopted. The field of nutrigenomics

remains in its infancy and, according to the published literature, no definite association has been identified between the genes usually examined as part of nutrigenomics and diet-related diseases (Pavlidis, Patrinos, & Katsila, 2015); indeed, those authors identify concerns at the scientific interface between bioethics, nutrigenomics, and personalised nutrition. The published literature urges caution pending further research into nutrigenomics and, If NT is evidence-based, the profession - at whatever level - would do well to heed such caution; this hesitancy may potentially be reflected in the presence of only a small minority (1.7%) survey respondents on the Register of Nutrigenomic Counsellors.

Ignoring such calls for caution, and being unduly hasty in embracing this emerging field, may compromise the profession's profile and ability to be taken seriously as operating from a firm evidence-base. The majority (69.65%) of this sample reported that although public perception of NT was better than previously, there was still room for improvement; a smaller element (10.45%) of the sample reported that public perception of NT was poor. Looking at how NT is regarded by the mainstream medical profession, the vast majority of this sample (68.185%) perceive that it is poorly regarded. There has been considerable effort made by all areas of the profession to enhance and improve the perception in which it is viewed and the authors question the impact on such perception and associated subsequent concerns, of embracing an emerging field before it has been fully endorsed and evidenced.

The regard in which the profession is held, standards of professional practice, and the Core Curriculum, all interface with the legislative framework in which NT is practised and operates. Professional bodies and training providers may benefit from considering the concerns around the legislative framework as expressed by some of this survey's respondents. A majority of the participants (only 29.85%) understood the need for a legislative framework; 28.61% found it confusing and 29.6% do see the need but have concerns. That practitioners can be anything less than clear on the need for and extent of the legislative framework is a matter of concern and needs further consideration, whether in evaluation of the Core Curriculum or in the development of compulsory CPD modules by professional associations.

#### Limitations:

This investigative study was undertaken by two qualified nutritional therapists who are novice researchers; as such, it may be considered adequate for purpose but the authors urge caution in the interpretation of results and further research into the profession is clearly warranted. Any future research may consider the identified limitations of this study.

Sample size was beyond researcher expectations and reflects AB's persistent efforts in promoting the survey to and enlisting the support of gatekeepers in participant recruitment. The reliance on gatekeepers to access and recruit participants was necessary, as a directory of therapists is not held centrally. Future investigations into professional trajectories may benefit from increased engagement by gatekeepers or from a centrally held list of qualified therapists created for research purposes only.

The sample covered a wide range of ages but was skewed toward the female. As a 'complementary therapy' the profession has traditionally been female-centric, potentially explaining the skew, especially as men are known to engage with questionnaires (Gosling, Vazire, Srivastava, & John, 2004). That the majority of the sample are based in England may reflect the structuring of the geographic location questions. It may also suggest that complementary therapies such as nutritional

therapy are more widely accepted in England or that there is a stronger business case for nutritional therapy in England when compared with other countries especially those in the union. Further investigations may benefit from greater question, or commercial, clarity.

The sample attracted predominantly practising therapists; the proportionately lower number of non-practising therapists may be due to the recruitment methods applied. Further exploration of reasons for qualifying and not entering or entering then leaving, the profession may benefit from considering how to target such potential participants, however a consideration here is access to non-practising therapists.

Many of the respondents had qualified prior to the evolution of the Core Curriculum; whilst the Grandparenting process may have ensured such practitioners reached the standard required to practise, no comment can be made on the training provision of courses delivered prior to the Core Curriculum.

The survey was administered electronically; such questionnaires have been shown to capture an appropriately diverse sample and to yield results consistent with traditional pen and paper methods (Gosling et al., 2004). Questionnaires are commonly employed in research, being practical, inexpensive, and convenient for both the participant and the researcher (McDonald, 2008); they can be assessed for reliability, but anonymising responses, such as in this survey, may encourage rapid responding. Whilst rapid responding was not identified in Gosling et al.'s, (2004) investigation into the validity of online questionnaires, rapid responses may have featured in this study's questions requiring a Likert scale response; without the inclusion of 'logic traps' (Chen & Li, 2015) to control response bias, this is difficult to detect. Future research involving questionnaires, particularly when anonymised, may benefit from the incorporation of logic traps to those questions that can be rapidly answered. Questionnaires and surveys may be useful for first-line data capture, with semi-structured interviews or focus groups used to follow-up and elaborate on the main findings.

## Conclusion

This investigation aimed to offer initial information regarding nutritional therapy in the UK. Although the authors acknowledge limitations in the sample and procedure, and urge caution in results interpretation, there are some interesting and hopefully useful observations. Although there has been an increase in the number of men entering nutritional therapy, it remains a female-centric profession, populated mainly by the older person; the profession may potentially experience, or be experiencing, specific challenges and concerns as a result. Whilst the 'Results' and 'Discussion' section provides detailed analyses, here the authors consider the aims and objectives of this research. One of the primary objectives for this research was to ascertain suitability of 'fit' between qualification and workplace: for the vast majority of this sample, their training equipped them to practice; a few had additional requirements but, as the sample was not restricted to recent graduates, these may be related to deficits in knowledge provision under earlier courses. Such deficits may have been subsequently addressed by CPD or other training. Despite initial and subsequent training preparing graduates for the practice that the majority go on to enter, a substantial number do not generate either a primary or secondary income from the profession. Whilst it is acknowledged that the majority do earn a primary or secondary income, and may therefore be considered to have successfully entered the workplace, this nonetheless leaves questions about the non-earners. For a small minority the lack of an income was enough to propel them out of practice; others have chosen to remain, for reasons that this study did not explore. Understanding barriers to generating income, including knowledge deficits, as well as why practitioners remain in a profession that does not generate an income, may inform the development of the Core Curriculum, or policies and practices of professional bodies that work in their members' interest. Income from a profession is only one consideration; the associated costs of remaining in the profession, the direction the profession is taking, and the legislative framework in which the profession operates are all aspects which were investigated in this sample. Although concerns were expressed in several areas, of note is that compulsory registration with the CNHC has not been observed by some respondents, that methods used to inform clinical approach may not always be evidence-based, and that there is a lack of unanimous understanding or perceived need for the legislative framework. Many respondents were concerned about the regard in which the profession is held by the public and the mainstream medical community, and there is the potential for this regard to be negatively affected by the direction taken by the profession, particularly in embracing emerging fields. Whilst these concerns may be addressed through the development of the Core Curriculum and the policies of professional bodies, linking any decisions and actions to the positive enhancement of the profession's profile may result in concomitant potential benefits such as increased business streams and income generation, and contribute to the creation of a strong, thriving professional community.



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## Appendices

### Appendix 1

#### Professional trajectory Questionnaire

1. A bit about you: how old are you?
  - 20-30
  - 31-40
  - 41-50
  - 51-60
  - 61-70
  - 71+
  - Prefer not to say
2. What gender are you?
  - Female
  - Male
  - Prefer not to say
3. In which country do you reside?
  - England
  - Scotland
  - Wales
  - Northern Ireland
  - Republic of Ireland
  - Other European
  - Rest of the world
  - Prefer not to say
4. If you answered "England" to the question above, please state in which county?. If this is not applicable or you prefer not to say, please type N/A/ - **box for answer**
5. What is your marital status
  - Single
  - Married
  - Living with partner
  - Prefer not to say
6. Do you have any children living with you?
  - Yes
  - No
  - Prefer not to say
7. If you answered "yes" to the above, please tell us how old they are.
  - 0 - 15
  - 16 - 17
  - 18 - 21
  - 22 - 30
  - 31+
  - Not applicable

- Prefer not to say

8. Are you currently in clinical practice  
Yes/No

9. If yes, for how many years did you practice? ( If no please type N/A) - **box for answer**

10. If “no” have you ever been in clinical practice?

- Yes
- No
- Not applicable

11. If you answered “yes” to the above, for how many years did you practice? **box for answer**

12. If you entered then left clinical practice, what was your primary reason for this?

- Personal circumstances
- Inadequate training
- Lack of confidence
- Insufficient earnings
- Prefer not to say
- Not applicable
- Other, please specify: **box for answer**

13. If you have never entered clinical practice, what was your primary reason for this?

- Personal circumstances
- Inadequate training
- Lack of confidence
- Prefer not to say
- Not applicable
- Other, please specify: **box for answer**

14. What is your status as a nutritional therapist?

- Self-employed
- Employed
- Prefer not to say
- Not applicable

15. If you are employed, what is your job title? **box for answer**

16. Please tell us about any professional body membership(s) you may have.

- CNHC
- BANT
- FnTP
- NNA
- Prefer not to say
- Not applicable
- Other, please specify **box for answer**

17. If you are currently working in nutritional Therapy or an associated role, please indicate what income Nutritional therapy provides you.

- Primary
- Secondary
- Negligible
- Not applicable
- Prefer not to say

18. What is the primary source of your income from nutritional Therapy

- Clinical consultations
- Sale of supplements/products
- Sales of laboratory tests
- Corporate work
- Health journalism/writing/blogging
- Teaching (clinical or academic)
- Group work
- Cooking classes/workshops
- Clearance of client cupboards
- Food shopping trips/ supermarket navigation
- Specialist nutritional therapy
- Not applicable
- Prefer not to say
- Another CAM
- Other, please specify:

19. Please indicate in descending order of contribution the THREE MAIN SOURCES of your Nutritional Therapy income from: Clinical consultations, Sale of Supplements/products, ;sale of laboratory tests; Corporate work;health journalism, writing , blogging.

**box for answer**

20. A bit about your training: In which year did you qualify in nutritional therapy

**box for answer**

21. From which training organisation did you gain you INITIAL nutritional therapy qualification? **box for answer**

22. Which INITIAL qualification did you get?

- Diploma
- Degree
- Masters degree
- Other, please specify:

23. What was your primary reason for choosing your initial qualification?

- To work in clinical practice
- To complement/ enhance work in another modality
- To improve employment opportunities
- Personal interest/self-development
- Other, please specify:

24. Using a scale from 1-10, where 1= strongly agree, please rate this statement: I think my current role is well suited to someone with my qualification.

25. Using the same scale as above, please rate the following statement: I make use of the subject/discipline I developed on my initial course
26. Staying with the same scale, please rate the following statement: I make use of the skills I developed on my initial training course.
27. Did you initial training equip you to practice.
- Yes
  - No
  - Prefer not to say
28. If you required further training in nutrition knowledge in which areas, select all that apply. If you did not require additional training please select " not applicable"
- Anatomy & physiology
  - Biochemistry
  - Macronutrients
  - Micronutrients
  - Phytonutrients
  - Dietary Reference Values
  - Dietary analysis
  - Developing nutritional strategies
  - Applying nutritional strategies
  - Anthropometric testing
  - Interpreting medical test results
  - Interpreting functional test results
  - Developing strategies following testing
  - Establishing a need for supplements
  - Using the evidence-base to inform supplement protocols
  - Checking drug interactions, contraindications and/or depletions
  - Not applicable
  - Prefer not to say
29. If you required further general health behaviour change training, in which area, select all that apply. If you did not require additional training please select " not applicable"
- Case studies
  - Role play
  - Clinic observations
  - Supervised clinics
  - Clinical skills
  - Communication skills
  - Psycho-social influences on food choice
  - Psychology: health behaviour change
  - Motivational skills
  - Critical thinking
  - Evaluation and reflection
  - Policy awareness
  - Writing for publication
  - Research skills
  - Not applicable Prefer not to say

30. If you required further training in business management, in which areas? Select all that apply. If you did not require additional training please select "not applicable"

- Marketing
- Accounting
- Working with the Media
- Working with social media
- Working with groups
- ASA/EU legislation
- Setting up a clinical practice
- Niche development
- Presentation skills
- Not applicable
- Prefer not to say

31. If you have undertaken additional or further, recognised formal training qualifications, please list them here. If non please enter N/A **box for answer**

32. A bit about your clinical approach: What informs your nutritional therapy protocols? Select all that apply

- Scientific journals
- CPD
- Industry events (Supplement companies/ Laboratories)
- BANT Newsletter
- Internet forums/ discussion groups
- Not applicable
- Prefer not to say
- Other, please specify

33. Do you use a systems biology approach?

- Yes
- No
- Unsure
- Not applicable
- Prefer not to say

34. If "yes" is this functional medicine?

- Yes
- No
- Unsure
- Not applicable
- Prefer not to say

35. Does functional medicine inform your clinical decisions?

- Yes
- No
- Unsure



- Not applicable
- Prefer not to say

36. What additional training have you done in systems biology

- Functional medicine
- Another programme
- Self-directed study/ research
- Not applicable
- Prefer not to say

37. This concerns "nutrigenomics" Are you aware of nutrigenomics?

- Yes
- No
- Unsure
- Not applicable
- Prefer not to say

38. Are you currently on the register of Nutrigenomic counsellors?

- Yes
- No
- Not applicable
- Prefer not to say

39. Do you feel that you have sufficient knowledge to incorporate nutrigenomics into your clinical practice

- Yes
- No
- Not applicable
- Prefer not to say

40. In your opinion, amongst your client base, is there an interest in nutrigenomics?

- Yes
- No
- Not applicable

41. A little bit about how you market yourself: How do you currently market yourself, select all that apply.

- Word of mouth
- Talks/ presentations
- Professional associations or networks
- Posters
- Leaflets
- Web site
- Twitter
- Facebook
- Do not actively market
- Not applicable
- Prefer not to say

42. Of the methods above, what do you think are the most effective ( in descending order)/ Alternatively , please state in the answer field if you do not self market, prefer not to say or this is not applicable therapy **box for answer**
43. How do you think that nutritional therapy is perceived by the public
- Well-perceived; nutritional therapy is well-regarded.
  - Poorly-perceived; nutritional therapy is poorly-regarded.
  - Better than it has been, but with some improvement required.
  - Not as well-regarded as it has been.
  - I don't know how the public perceives nutritional therapy.
  - Not applicable.
  - Prefer not to say.
  - Other, please specify:
44. How do you think nutritional therapy is currently perceived by the public
- In my experience, it is well-regarded.
  - In my experience, it is poorly-regarded.
  - I have no experience of how nutritional therapy is regarded by medical professionals.
  - Not applicable.
  - Prefer not to say.
  - Other, please specify:
45. How do you think nutritional therapy is perceived by mainstream medical professionals
- In my experience, it is well-regarded.
  - In my experience, it is poorly-regarded.
  - I have no experience of how nutritional therapy is regarded by medical professionals.
  - Not applicable.
  - Prefer not to say.
  - Other, please specify:
46. Please use the space below to add any other information that you feel may be relevant or of interest. If you do not wish to add anything , please enter N/A?

## Appendix 2

## Ethical Application - What do Nutritional Therapists in the UK do? - BENBOW 2013/2014 107

## IHS Ethics

To: [Alison Benbow](#)

14 October 2014 09:55

Dear Alison

Further to your recent application relating to the above project on behalf of the IHS REC I am now very pleased to approve your application for ethical approval.

Your approval reference code is: BENBOW 2013/2014 107

Best wishes and good luck with the project,

With kind regards on behalf of the IHS Ethics Committee

With regards

Chair of Institute of Health and Society Ethics Committee  
Professor Eleanor Bradley PhD CPsychol AFBPsS  
Professor of Health Psychology  
Institute of Health and Society  
University of Worcester  
Henwick Grove  
WR2 6AJ

**From:** Eleanor Bradley  
**Sent:** 26 August 2015 12:08  
**To:** Alison Benbow; IHS Ethics  
**Subject:** RE: A query?

Hi Alison

If you are extending the work beyond the UK – due to participants who have come forward – then you would need to amend the title of the study to reflect this.

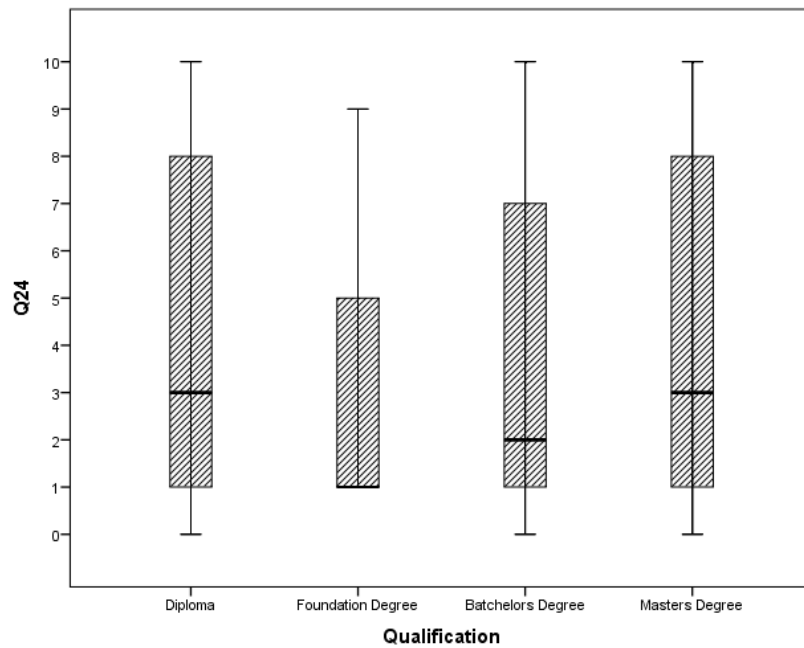
I would think it would be possible to treat this as a minor amendment to the approved proposal – although you should refer to section 4.1.11 of the ethics policy (see attached) to double check that you're happy with this. Reading your email, you haven't changed your recruitment tactics, even though you have attracted participants from outside your original intended location (the UK).

If you are happy that this change represents a minor amendment, and not a significant deviation, you just need to drop an email to Emma Roper via the [IHSEthics@worc.ac.uk](mailto:IHSEthics@worc.ac.uk) to notify her of the change of title and that this represents a minor amendment to the study. We can then keep this with the records of your study.

With regards

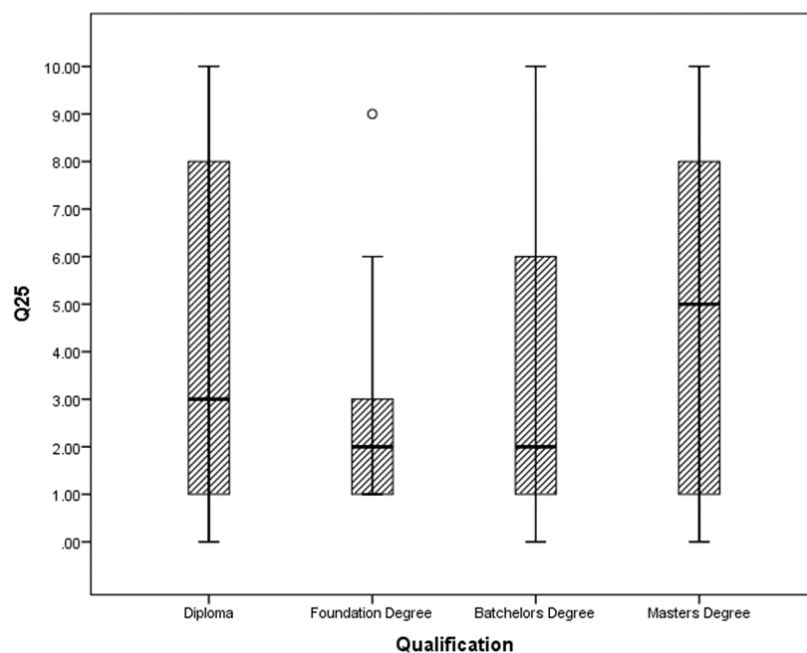
Eleanor

## Appendix 3



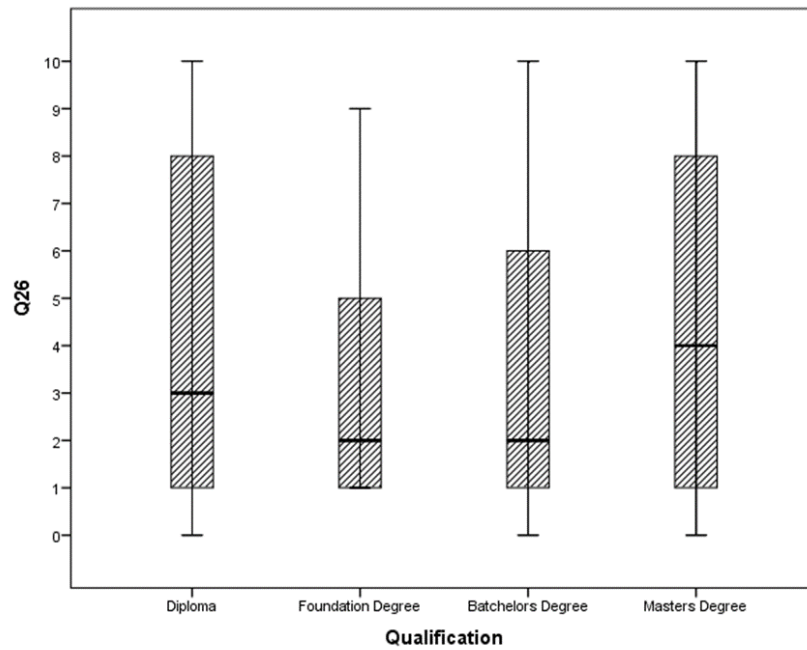
*Box and Whisker plots of Question 24, grouped by Qualification*

*There was no significant difference in the response to question 24: 'Using a scale of 1 – 10 where 1 equals strongly agree, and 10 equals strongly disagree, please rate this statement: 'I think my current role is well suited to someone with my qualification.'*



**Box and whisker plots of Question 25, grouped by qualification**

**There was no significant difference in the response to the question 'I make use of the subject/discipline knowledge acquired on my initial training course' based on level of qualification.**



Box and Whisker Plots for question 26 grouped by qualification

There was no significant difference in the response to the question: "I make use of the skills I developed on my initial qualification course" based on level of qualification"

