



## A survey of chiropractors' use of nutrition in private practice

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### Abstract

**Objective:** To survey the private practice use of nutrition by chiropractors with emphasis on recommendations and education.

**Design:** A 3-page mail survey was sent to chiropractors practicing in the United States.

**Results:** The response rate was within the normal response range, 34% (74 of 217). Of those that responded, 77% were male; the mean number of years since graduation from chiropractic college was 13, with a range from 1-39 years. The average practice time spent on nutrition was 19%. Fifty-three percent of responders felt that their chiropractic college provided them with an adequate understanding in nutrition. Eighty-one percent incorporated nutritional counseling, handed out nutritional literature or recommended nutritional supplements. Forty-two percent felt that chiropractors are able to address all nutritional concerns and 21% feel that the services of a nutritional spe-

cialist should only be used for second opinion interpretations.

**Discussion:** Nutrition is an important factor in the pursuit of optimal health. Most chiropractors in our sample incorporated nutritional services in their practice. The results of this study suggest that a significant amount of practice time is spent on services other than chiropractic adjustments. Approximately half of the chiropractors felt that their chiropractic college provided an adequate understanding in nutrition.

*Key Indexing Terms:*  
*Chiropractic; Nutrition; Recommendations*

### Introduction

The topic of nutrition is covered in chiropractic education. We were particularly interested in answering the following questions: How much time is spent by chiropractors on nutrition in private practice? What are their concerns and do they feel adequately prepared to utilize this information in practice? Another parameter we investigated

included the types of supplements recommended most commonly.

Chiropractors comprise the third largest primary health care profession behind medicine and dentistry. More than 50,000 chiropractors practice in the United States. The number of chiropractors is projected to grow rapidly to 95,200 by the year 2005, nearly double current estimates (1). Chiropractic is an important component of the American health care system and the largest non-allopathic health profession. During 1997, Eisenberg et al. (2) estimated there were 629 million visits to alternative medicine practitioners, which exceeded the projected number of visits to all primary care physicians in the United States by 243 million. To call chiropractic "alternative" is problematic; in many ways it is distinctly mainstream (3).

There has been only one investigation on the use of nutrition in the private practice of chiropractors (4). Previous research indicates that the national chiropractic average for incorporating nutritional counseling is 83.5% (5). Continued growth of the chiropractic profession is inevitable and therefore, it is important to investigate which

clinical procedures we are utilizing on a daily basis. The identity of chiropractic is intimately related to its historical separation from the philosophy of allopathy. With the use of various procedures such as vitamin supplementation and dispensing of herbs, are we compromising our uniqueness in philosophy?

**Methods**

This survey was reviewed by a panel of chiropractors in private practice, one chiropractic researcher, a nutritionist and an exercise physiologist. This investigation was approved by the Miami University Human Subjects Guideline Committee. A 3-page survey was mailed to a random sample of 217 American Doctors of Chiropractic after a trial field test.

Information was requested on education and practice characteristics, utilization of nutritional recommendations and counseling with an emphasis on the types of nutrients recommended, as well as the perceived role of chiropractors to offer these services to their patients. Respondents were assured of confidentiality and anonymity. Only one mailing was sent, with no following phone calls or post cards.

**Results**

The survey response rate was 34%. This is about the normal rate of response observed in such studies (4,6). Data from 74 Doctors of Chiropractic were included in the analysis. The vast majority of chiropractors in this survey use nutrition with their patients.

The median year of graduation was 1986 and the mean year of graduation was 1985 (Table 1). Over seventy-percent of respondents maintained a solo private practice.

The average chiropractor in this survey operated 51% of their practice as pain or symptom relief care. The number of

Table 1. Demographic characteristics of the respondents

<u>Gender</u>	
Male	77%
Female	23%
<u>College of graduation</u>	
Life	15%
Northwestern	14%
Palmer	14%
Texas	13%
National	10%
Los Angeles	10%
Life West	7%
Western States	6%
Logan	3%
New York	3%
Palmer West	3%
Cleveland	1%
Sherman	1%
<u>Year of graduation</u>	
Mean	1985
Median	1986
<u>Type of practice</u>	
Solo practice	71%
Group practice	29%
Pain/symptom relief	51%
Personal injury	23%
Pediatric	9%
3 <sup>rd</sup> party pay	42%
Wellness care	29%
Cash practice	38%
<u>Number of patients per week</u>	
Average	122
Median	100

Table 2. Nutrition utilization patterns (n=74)

Incorporate nutritional counseling, literature or supplementation	81%
Average % of practice time that is nutrition oriented	19%
Average % patients counseled on nutrition	37%
Average % patients given nutritional literature	22%
Average % patients recommended to take supplements	50%
Average % patients requesting nutritional advice	28%
Age range of patients counseled on nutrition	birth-100yrs.
Average number of postgraduate nutrition hours	84 hrs.

Table 3. Nutritional products recommended most frequently

Herbs	55%
Vitamins	78%
Minerals	65%
Nutrient combinations to treat specific disease	54%

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Table 4. Nutritional assessments used with patients

Symptoms	74%	History	73%
Food record	42%	Food frequency	35%
Body composition	41%	Blood/urine analysis	36%
Hair analysis	27%	Applied Kinesiology	39%
Supplement use	51%	Subluxation pattern	46%
Anthropometry	14%		

patient visits per week averaged 122 with the median of 100 indicating a large variation in the size of practices amongst responders. Eighty-four hours of postgraduate instruction on nutrition was received by the average Doctor of Chiropractic, in this survey (Table 2). The age range of patients being counseled on nutrition was from birth to 100 years.

Table 3 indicates that more than 53% of all chiropractors surveyed recommend vitamins, herbs, and minerals and nutri-

ent combinations to treat specific disease. Vitamin usage was the most recommended product according to our sample.

Approximately half (53%) felt that their chiropractic college provided them with an adequate understanding in nutrition. When asked if they felt it was their obligation as a health professional to offer nutritional services to patients, 81% said yes. Seventy-four percent of chiropractors have not noted an increase in obesity in their

practices. Survey participants recommend that 50% of their patients take nutritional supplements.

Respondents were asked to indicate which nutritional assessments they utilize with patients (Table 4). Symptoms (74%) and history (73%) were the 2 primary pieces of information used as nutritional assessment. Fifty-one percent of the chiropractors surveyed used nutritional supplementation as means of assessment and nearly half (46%) used the subluxation pattern of the patient as an assessment tool.

Respondents were asked to report the sources of nutritional information they utilize (Table 5). The primary source of nutritional information the surveyed chiropractors' use is chiropractic journals and texts followed closely by health magazines and books. The least used information was obtained via health food stores.

Respondents were also asked to indicate their level of agreement with statements regarding the services of nutritional specialists (Table 6). Forty-four percent agreed that chiropractors are able to address all nutritional concerns and do not require the service of a dietician or nutri-

Table 5. Sources of nutritional information utilized

Chiropractic journals/texts	70%	Vendor information	57%
Postgraduate seminars	59%	World wide web	35%
Health magazines/books	69%	Word of mouth	38%
Medical journals	58%	Health food stores	34%

Table 6. Expertise and authority of chiropractors and nutritional specialists<sup>a</sup>

Statement	Disagree	Neutral	Agree
Chiropractors are able to address all nutritional concerns and do not require the service of a dietician or nutritional specialist	44%	14%	42%
The services of a nutritional specialist should only be used for second opinion interpretations	44%	35%	21%

<sup>a</sup>Data from a five-point Likert scale (strongly disagree to strongly agree) were collapsed into three categories

tional specialist. Only 21% agreed that the services of nutrition specialists should be used for second opinion interpretations.

An analysis of variance (ANOVA) was run comparing the percentage of time spent on nutrition, number of patient visits per week and percentage of patients recommended take nutritional supplements, to college of graduation. There was no statistical significance found amongst these variables.

We performed a few simple comparisons on selected variables of interest from type of practice, and nutritional recommendations/assessments versus number of patient visits. A correlational analysis showed a positive correlation ( $r+.2604$ ;  $p<.05$ ) between

the percentage of pediatric visits per week and the number of total patient visits per week. ( $t(66)+3.24, p<.05$ ). Further, those chiropractors who used supplements as a means of nutritional assessment also saw significantly less numbers of patients per week ( $t(66)+2.02, p<.05$ ).

**Discussion**

The survey response rate was 34%, there were no follow up phone calls or post cards sent to elicit greater data. The low response ( $n+74$ ) may suggest that the chiropractors who chose to respond may not be representative of the profession as a whole, and perhaps their data may not be generalizable. However, similar return rates of other studies (4,<sup>^</sup>) sug-

gest that the nature of these type questionnaires may be a factor in producing the poor response.

The majority of our sample of chiropractors (81%) incorporate nutritional counseling, hand out nutritional literature or recommend nutritional supplements to their patients. In contrast, only 53% of those surveyed felt that their chiropractic college provided them with an adequate understanding in nutrition. Examination of nutrition designated units in 9 chiropractic colleges suggests that these colleges are not a source of public nutritional misinformation (7). Student options for nutritional education during chiropractic college depend upon the curriculum of the individual college. A curriculum at an accredited chiropractic college requires coursework in biochemistry, basic nutrition and clinical nutrition (8,9).

Somewhat alarming is that in our sample, 54% of responders use nutrient combinations to treat specific disease. Since the diagnosis and treatment of disease is medical in nature, it is of concern that chiropractors are attempting to treat disease with nutritional remedies. The Association of Chiropractic Colleges (ACC) states that chi-

ropractic is concerned with the preservation and restoration of health, and focuses particular attention on the subluxation (10). Doctors of Chiropractic evaluate and facilitate biomechanical and neuro-biological function and integrity through the use of appropriate conservative, diagnostic and chiropractic care procedures (11). No person would dispute the fact that nutrition plays an important role in patient care and optimal well-being. However, when we recommend any chemical compound that may be used on or administered to humans that aid in the diagnosis, treatment or prevention of disease or other abnormal condition, for the relief of pain or suffering, or to control or improve any physiologic or pathologic condition - we are recommending a drug (12). Chiropractic has always held itself out to be a discipline which emphasizes the inherent recuperative power of the body to heal itself without the use of drugs or surgery.

The results of this study demonstrate that chiropractors spend a fair amount (19%) of their practice time on nutritional matters. Thirty-seven percent of the patients in the responding chiropractors' practices are counseled on nutrition and 50% of their

practice members are recommended to take supplements. The nutritional product recommended most frequently by chiropractors are vitamins followed by minerals.

The most common sources of nutritional information used by chiropractors are chiropractic texts and journals followed closely by health magazines which may contain less than accurate information. The least likely source of nutritional information is from health food stores. A similar type response has been seen previously for these sources of information by practicing chiropractors (4). It is apparent in our sample that the chiropractors seeing the greatest volume of patients see significantly more children, and less frequently recommend supplements and nutrients to treat specific disease. This may be because they have less practice time in which to do these activities. In busier practices, the focus would seem to be less on nutrition and more on the traditional adjusting of patients.

The statement that chiropractors are able to address all nutritional concerns and do not require the service of a dietician or nutritional specialist was disagreed with by 44% of responders, while 42% agreed.

Clearly, this statement brings about nearly equal and opposing viewpoints. The statement that services of a nutritional specialist should only be used for second opinion interpretations was disagreed with by 44% of the doctors and was agreed with by 21%. This evidence indicates that the majority of chiropractors either are undecided about the preceding statements or feel that they are able to provide autonomous nutritional information.

### Conclusion

This study shows that chiropractors are spending almost 20% of their practice time counseling, handing out literature or recommending supplements to their patients. Future research may want to focus on the difference between nutritional therapy and medical therapy in terms of definitions and philosophical constructs. It is estimated that the largest number of patient visits are to non-allopathic health care providers, and that visits to chiropractors represent almost 31% of this group (2). Because of the number of people that chiropractors see on a daily basis, their concern with the preservation and restoration of health, and the presence of nutrition in their educational

curriculum, these doctors may be in a unique position to educate people on the benefits of nutritional hygiene. However, the practice of using nutrient combinations to treat specific disease may be construed by some to be the practice of medicine and not chiropractic.

### References

1. Cooper RA, Prakash L, Dietrich CL. Current and projected workforce of nonphysician clinicians. *JAMA* 1998;280:788-794.
2. Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. *JAMA* 1998;280:1569-1575.
3. Kaptchuk TJ, Eisenberg DM. Chiropractic: Origins, controversies and contributions. *Arch Intern Med* 1998;158:2215-2224.
4. Newman CF, Downes NJ, Tseng RY, McProud LM, Newman LK. Nutrition-related backgrounds and counseling practices of doctors of chiropractic. *J Am Diet Assoc* 1989;89:939-943.
5. Christensen MG, Delle Morgan DR. Job analysis of chiropractic: a project report, survey analysis and summary of the practice of chiropractic within the United States. Greely: NBCE, 1993.
6. Temple NJ. Survey of nutrition knowledge of Canadian physicians. *J Am Coll Nutr* 1999;18:26-29.
7. Jamison JR. Nutrition education of chiropractic students: a survey of colleges recognized by the Council on Chiropractic Education. *J Manipulative Physiol Ther* 1990;13:316-21.
8. Chapman-Smith D. Chiropractic Education and Licensure. *The Chiropractic Report* 8: 1-6, 1994.
9. National College of Chiropractic: 1998-1999 Bulletin. NCC LVII:79-81, 1998.
10. Position paper #1. Association of Chiropractic Colleges. July 1996.
11. Position paper #2. Association of Chiropractic Colleges. December 1996.
12. Dorland's Illustrated Medical Dictionary, 28<sup>th</sup> edition. Philadelphia: W.B. Saunders Company, 1994.