# Dietary supplement recommendations by Saskatchewan chiropractors: results of an online survey

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#### **Abstract**

#### **Background**

Chiropractors receive training in nutrition during their education, previous surveys have found that chiropractors frequently provide recommendations to patients relating to nutrition and dietary supplement intake. However, it has not been ascertained which specific supplements chiropractors recommend or the types of health conditions for which supplement recommendations are made.

#### **Objective**

The purpose of this study was to determine which dietary supplements are most commonly recommended by chiropractors in the province of Saskatchewan, Canada and the health conditions for which supplement recommendations are made.

#### **Design**

An online survey of licensed chiropractors practicing in the province of Saskatchewan , Canada was distributed three times following online and in-person notifications of the survey.

#### Statistical analyses performed

Descriptive statistics were reported, predominantly in the form of means and proportions.

#### **Results**

A response rate of 45% was obtained. All of the respondents (100%) indicated providing nutritional advice or counselling to patients, while nearly all (99%) indicated providing dietary supplement recommendations to patients. Respondents estimated that they provide nutritional advice or counselling to 31% of their patients on average, and recommend dietary supplements to an average of 25% of their patients. The most commonly recommended supplements were glucosamine sulfate, multivitamins, vitamin C, vitamin D, calcium, omega-3 fatty acids, and probiotics. The most common reasons to recommend dietary supplements were for "general health and wellness" (82% of respondents), "bone health" (74%), "rheumatologic, arthritic, degenerative, or inflammatory conditions' (72%), and "acute and/or chronic musculoskeletal conditions" (65%).

#### Conclusion

The majority of respondents indicated providing nutritional counselling and recommendations for dietary supplements to their patients. Respondents generally recommend a small number of dietary supplements and provide these recommendations and counselling to fewer than half of their patients on average, while tending to focus on conditions most closely related to the scope of practice of chiropractors. The findings of this study may have been limited by selection bias owing to the low response rate and as those who respond to surveys are often more likely to respond positively.

#### **Keywords:**

Chiropractic; Nutrition; Survey; Dietary supplement

#### Research

### The Nordic maintenance care program: the clinical use of identified indications for preventive care

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#### **Abstract**

#### **Background**

Low back pain (LBP) is a prevalent condition and has been found to be recurrent and persistent in a majority of cases. Chiropractors have a preventive strategy, maintenance care (MC), aimed towards minimizing recurrence and progression of such conditions. The indications for recommending MC have been identified in the Nordic countries from hypothetical cases. This study aims to investigate whether these indications are indeed used in the clinical encounter.

#### **Methods**

Data were collected in a multi-center observational study in which patients consulted a chiropractor for their non-specific LBP. Patient baseline information was a) previous duration of the LBP, b) the presence of previous episodes of LBP and c) early improvement with treatment. The chiropractors were asked if they deemed each individual patient an MC candidate. Logistic regression analyses (uni– and multi-level) were used to investigate the association of the patient variables with the chiropractor's decision.

#### Results

The results showed that "previous episodes" with LBP was the strongest predictor for recommending MC, and that the presence of all predictors strengthens the frequency of this recommendation. However, there was considerable heterogeneity among the participating chiropractors concerning the recommendation of MC.

#### **Conclusions**

The study largely confirms the clinical use of the previously identified indications for recommending MC for recurrent and persistent LBP. Previous episodes of LBP was the strongest indicator.

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**Review** 

## Does postural sway change in association with manual therapeutic interventions? A review of the literature

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#### **Abstract**

#### Study design

Literature Review

#### **Objectives**

The objective of this literature review was to determine if postural sway changes in association with manual therapeutic interventions and to investigate whether any changes occur in healthy individuals or in association with pain intensity.

#### **Summary of Background data**

Improving postural stability has been proposed as a goal of manual therapeutic interventions. So far, no literature review has addressed whether there is supportive evidence for this and if so, what factors may be associated or causative for observed sway alterations.

#### Search methods

Seven online databases (PubMed, MEDLINE, EMBASE, CINAHL, Web of Science, ScienceDirect and the Cochrane library) were systematically searched followed by a manual search of the retrieved papers.

#### Selection criteria

Studies comparing postural sway derived from bipedal force plate measurements in association with a manual therapeutic intervention, ideally compared to a control group.

#### **Data collection and analysis**

Two reviewers independently screened titles and abstracts for relevance, conducted the data extraction and the risk of bias assessment which was conducted using the RTI item bank. A descriptive analysis was conducted as the heterogeneous study designs prevented pooling of data.

#### Results

Nine studies of varying methodological quality met the inclusion criteria. No direct comparison of data across the studies was possible. There was no evidence that manual interventions lead to a change in postural sway in healthy individuals regardless of the body regions addressed by the intervention. There was some indication that postural sway may change at follow-up measurements in pain sufferers; however, this may be due to variations in pain intensity rather than resulting from the intervention itself.

#### **Conclusions**

There is no conclusive scientific evidence that manual therapeutic interventions may exhibit any immediate or long-term effect on COP excursions. Any changes in sway may be attributable to decreases in pain intensity.

#### **Keywords:**

Center of pressure; Postural sway; Manual therapy; Intervention

#### Research

# Changes in primary care physician's management of low back pain in a model of interprofessional collaborative care: an uncontrolled before-after study

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#### **Abstract**

#### **Background**

Tracking how clinicians treat patients provides an opportunity to explore how the clinical management of common musculoskeletal disorders evolves over time. We present an uncontrolled before-after study of a primary care physician's management of low back pain and describe how his involvement in an interprofessional collaborative practice was associated with a change in the management of patients with low back pain.

#### Method

Data from the electronic medical record of one primary care physician who participated in a study of a model of chiropractic-medical collaboration were retrospectively collected. Records of a sample of consecutive

patients prior to the start (i.e. pre-study, n = 51) and at the end of the collaborative study (i.e. study, n = 49) were collected.

#### **Results**

Demographics were similar in both groups but median number of physician visits (2.5 and 1.0), average prescriptions per patients (1.24 and 0.47), and total number of narcotic prescriptions (14 and 6) differed between pre-study and study groups, respectively. Separate analysis of only the records of low back pain study patients revealed that 61% were referred for chiropractic care during the study period. Patients who were not referred had more neurological deficits and leg pain but back pain severity and average number of prescriptions was about the same. Referred patients in the study group had about 25% fewer physician visits and imaging requests.

#### Conclusion

Based on this study of a single primary care physician, we hypothesize that doctors may change their prescribing behaviours and consultation rate for patients with low back pain when engaged in interprofessional collaborative care. Further research is required to test this observation in the population.

#### **Keywords:**

Interprofessional collaboration; Medication use; Provider behaviour; Chiropractic \*\*