

CHAPTER 46

NUTRITION ATTITUDE SCALE (NAS): VALIDITY AND RELIABILITY STUDY

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Introduction

A balanced diet is one of the fundamental parts (probably the most vital) which enables the society and its members to improve their economic situations, life, and existence within a welfare state (URL 1).

Considering the sex, age, and the physiological state of an individual, healthy eating means to supply enough food. Nutrition is essential to keep your health, safety, survival, and growth (Persil 2004). Nutrition is an indispensable part of life. Human beings are obliged to have a balanced and healthy diet to survive and live in a healthy way. The World Health Organization defines health as being good in terms of social, physical, and mental aspects (URL 2). Insufficient and unbalanced nutrition causes cardiovascular disease, high blood pressure, dyslipidemia, type 2 diabetes, obesity, osteoporosis, constipation, diverticular disease, iron deficiency, oral mucosal diseases, malnutrition and several types of cancer (URL 3).

The necessity of nutrition depends on the age, sex, weight, height, metabolic, and physical activities. According to this, each society has to create its own standard of energy and nutrition elements, which is up to the individuals. For example, the United States Department of Agriculture (USDA), regularly evaluates the suggested amount of human dietary intakes in terms of scientific literacy. The Nutrients and Nutrition Board reports the Recommended Dietary Allowances (RDA) every five years and calculates them in order to supply the needs of healthy individuals with a safe factor (Baysal 2002).

Nutrition is related to the financial, cultural, and social form of society. For this reason, it can be changeable over time. Increasing income, changes in culture and social life, raising the level of education, mums' getting a larger part in the workplace, removal of national borders, the increasing rise in communication, and trade, may all change the amount of nutrition in a society (Özçiçek Dölekoğlu 2002). Depending on an improving economy, the amount of convenience food has also increased. As a result of increasing production, there isn't always an increase in quality. With the increasing of production, some problems may occur in terms of a hygienic conditions, and this also affects a great number of humans in society. For these reasons, the diseases caused by convenience food are a vital problem all over the world (Topuzoğlu 2007).

Despite continuing changes in our bodies through life, especially during adolescence, nutrition and physical perception catch the attention. The main reason for this is having very intensive changes in the body in adolescence (Özbek 2010). Body displeasure is seen in adolescence, especially in girls (French *et al.* 1995). It is seen that even adolescents who haven't got obesity go on diets in order to lose weight (Levine *et al.* 1995). In this age group, the wish is to be in the 'ideal' form of the body in society's eyes, and for this reason, adolescents may have very unhealthy and insufficient nutrition (Demir 2006). Eating disorders and morbidity and mortality are chronic illnesses that threaten our lives.

Teenagers - especially girls - think that being fit and being 'skinny' are the same, and this causes anorexia and bulimia because of eating disorders (Güleç 2008, 102-110). Eating disorders are regrouped as individual, family, and social cultural issues, and affect the basic principles of having a relationship with the opposite sex, achieving excellence, worrying about height, displeasure in the body, and early menstruation (Güleç 2008, Uskun and Şabaplı 2013).

There are also a few emotional features about behaviors. Individuals gain some behaviors during their lifetime, and it is expected to improve in a positive way. Attitudes can't be seen always, but sometimes they can't turn into behaviors (Erdem 2008).

Attitude is an emotional readiness or tendency of individuals, seen as accepting or rejecting a person, group, institution, or thought. Attitudes can be predicted from the observable behaviors of individuals. The attitude of the individual influences his hate and love, as a part of his personality. (Özgülven 1999).

Attitudes are not innate, they are acquired by way of life, they are not temporary, and they show continuity for a certain time. Attitudes that

provide a regularity in the relationship between the individual and the object, reveal a bias in the human-object relationship. A positive or negative attitude towards an object is only possible if the object is compared to others. There are also social attitudes, like personal ones. Attitude is not a form of reaction, but rather a tendency to react. Attitudes can lead to positive or negative behaviors (Tavşancıl 2002).

Individuals can develop their attitudes towards the place they live in by taking part in various activities for the environment (Foley and Janikoun 1996).

The importance of attracting attention to concepts such as improper nutrition, unhealthy nutrition, healthy food and added nutrients increases. The aim of this study is to draw attention to the negative effects of nutritional behaviors of carbohydrate, protein, fats, vitamins, minerals, and nutrients such as carbohydrates, proteins, fats, vitamins and minerals.

Method

Writing the scale items and creating a trial form as a data collection tool: 41 items emerged in the first trial form to determine the form items. In order to ensure the meaningful validity of the articles, high school and university students were provided with the necessary readings. The items are arranged in 5-point Likert type, and are rated between ‘fully agree’ (5) and ‘Never agree’ (1) (Tezbaşaran 2008).

Data analysis: Factor analysis related to the construct validity of the data obtained from NAS (Nutritional Attitude Scale) applied to 110 high school and 196 university students was used. The suitability of the data set for basic component analysis was examined by the Kaiser-Meyer Olkin (KMO) coefficient and Bartlett Sphericity test (Balçı 2005, Karasar 1999).

Factor analysis is a prerequisite for a certain number of relationships between variables. The p test of the Bartlett test is 0.05, which is evidence of a sufficient relationship between the variables for factor analysis. In the test form, this value is 0.001.

In the study, the KMO value of 0.798 is an indicator of the suitability of the variables for factor analysis. Factor load values included in the scale were between 0.298 and 0.802; it was accepted that it explained the factor strength sufficiently. The total variance of the scale was found to be 58,908%. The anti-image correlation values between the items ranged between 0.515 and 0.918. As a result of factor analysis, 20 items with multiple ratios of 0.10 and less were used, and factor analysis was applied to six dimensions and 21 items. As a result of factor analysis, six

dimensions were formed. The scale included 18 positive, and three negative attitudes. Dimensions: carbohydrate (7 items), vitamins and minerals (4 items), fat and ready food (3 items), water (3 items), protein (2 items) and sensitivity (2 items) were named. The reliability coefficient of the dimensions ranged from 0.531 to 0.794, while the overall reliability coefficient was 0.795. The scores from the trial form were collected to test the reliability of the substances before the final scale was finalized. After the upper and lower groups were determined at 27%, independent t-test was performed. The 21 items included in the scale showed a significant difference in favor of the upper group.

Table 1: Nutritional Attitude Scale (NAS) Factor Analysis Results Table

The name of the factor	Sections	FACTOR WEIGHT	ANTI IMAGE CORRELATION	Explanation of factor (%)	dimensions of safety
Carbohydrates	I avoid eating desserts (baklava, etc.)	0.629	0.846	22,806	0.794
	I dislike eating wafers, chocolate, etc.	0.651	0.876		
	I don't like fast food (hamburger, toast, wrapped meat, etc.)	0.533	0.890		
	I avoid eating processed meat (sausages, etc.)	0.575	0.887		
	Hot or cold drinks with sugar bother me.	0.493	0.814		
	I avoid food and drinks with salt.	0.520	0.907		
	I avoid food with carbohydrates (bread, pasta, etc.)	0.353	0.918		
Vitamins and minerals	I love supplying my needs of vitamins from fruit.	0.591	0.761	12,300	.679
	I like eating fruit.	0.581	0.727		
	I like supplying my daily vitamins from the natural nutrients.	0.543	0.810		
	I want to supply carbohydrate, protein and fat from different supplies in each meal.	0.551	0.838		
and processed	I don't like consuming food with shelf life (biscuits, etc.)	0.671	0.790	6,965	0.623
	Even if I am hungry, I never eat processed food.	0.601	0.791		

	I never add oils (except from olive oil) sunflower oil, etc.	0.428	0.825		
Water	I try to drink at least 2 liters of water every day.	0.734	0.704	5,091	0.584
	I try to drink water whenever I can.	0.722	0.647		
	I don't reject bread with margarine.	0.298	0.565		
Protein	I feel as if I were a vegetarian.	0.802	0.578	6,135	0.743
	I love eating meat.	0.773	0.515		
Sensitivity	I am attracted to the magazines about nutrition.	0.692	0.773	5,613	0.531
	I don't miss the programs about nutrition.	0.629	0.856		
TOTAL DESCRIPTION OF THE VARIANCE: 58,908 KMO Scale Validity: 0.798 Bartlett Sphericity Test Chi Square: 1711,637 Df: 210 P <0.001 Reliability: .795					

The lowest 21 points, and the highest 105 points, can be obtained from the nutrition attitude scale. Higher scores from the scale; It will reveal that the individuals who filled the scale have a high attitude towards nutrition, and those who have low scores have a low attitude towards nutrition. It can be asserted that individuals' high attitude scores towards nutrition are sensitive to weight control and health. The Nutrition Attitude Scale (NAS) was developed for high school students and adults.

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