

Assessment of Quality of Life **for Home Enteral** Nutrition



Questionnaire developed by Nestlé Health Science

What

NutriQoL[®] is the first self-administered questionnaire developed by NHSC for all patients using Home Enteral Nutrition (HEN), regardless of their underlying condition or the method of nutritional formula administration. It is suitable for patients with various medical conditions who depend on enteral nutrition.

Why

The NutriQoL[®] questionnaire is used to assess the effectiveness of HEN, identify areas needing intervention, and track changes in patient health status over time. This type of feedback is important for continuously improving treatment strategies, thereby enhancing their overall care and quality of life.

How often

The NutriQoL questionnaire is typically administered 1-2 weeks after the initiation of HEN to allow patients to adapt to their new dietary regimen.

Subsequently, it is recommended to administer the questionnaire every 3 months for patients undergoing changes in HEN and every 6 months for those in stable conditions



The NutriQol questionnaire comprises 17 items grouped into two dimensions:

1) physical functioning and daily life activities

2) aspects of social life

Items 1-9 are positive, while 10-17 are negative.

Moreover, the NutriQoL® questionnaire also includes a **O to 100 visual analogue scale** to evaluate patients' overall health status

Instructions: Check the box next to the answer that best applies to each question

Start with 1A, then 1B, ensuring logical flow and move to the next main question (2A, 2B, etc.) ensuring all questions are answered sequentially

A		Frequency			
		never	sometimes	always	
		-1	0	1	
1	With HEN [Home Enteral Nutrition], I keep to my usual mealtimes [e.g., breakfast, lunch, afternoon snack, and dinner].				
2	HEN adapts to my preferences in terms of food characteristics [e.g., texture, color, smell, temperature, taste].				
3	Since I have been taking HEN, it is easier for me to move around. I feel more agile.				
4	With HEN, I can continue to do my daily activities (e.g., reading the newspaper, cooking, washing the car, cleaning, watching TV].				
5	Since I have been taking HEN, I see that my physical appearance is improving (e.g., I look healthier).				
6	Getting HEN supply is simple (e.g., it is easily available from in home infusion pharmacies or DME (durable medical equipment) company; I get the preparation/prescription/formula easily).				
7	With HEN, I trust that I am well nourished.				
8	With HEN, I have regained weight.				
9	HEN allows me to be able to go out with my friends.				
		1	0	-1	
10	HEN damages my skin (e.g., dryness, irritation, infections).				
11	HEN prevents me from sleeping well.				
12	I am worried that my body will adapt to HEN and I will not be able to eat again as before.				
13	With HEN, I miss chewing and tasting food.				
14	With HEN, I experience physical discomfort from feeding (e.g., bloating, burning, dry mouth and regurgitations).				
15	With HEN, my family keeps a closer watch over my feedings.				
16	With HEN, I limit activities with my friends to those that are not related to food.				
17	Since I have been taking HEN, I am more concerned about my health.				

Part A: Frequency with which patients perceive specific situations related to HEN (3 response options: never, sometimes, or always).



Part B: Importance that patients attach to the situations in part A (3 response options: not important at all, somewhat important, or very important).

В		Level of Importance.			Points
		not at all important	somewhat important	very important	A × B
		1	2	3	
1	For me, keeping my usual mealtimes is: [e.g., breakfast, lunch, afternoon snack, and dinner].				
2	For me, HEN adapting to my preferences in terms of food characteristics is:				
3	For me, moving around more easily and feeling more agile is:				
4	For me, being able to continue to do household chores is:				
5	For me, my physical appearance improving is:				
6	For me, getting HEN supply easily is: (e.g., breakfast, lunch, afternoon snack, and dinner).				
7	For me, trusting that I am well-nourished is:				
8	For me, regaining weight is:				
9	For me, being able to go out with my friends is:				
		1	2	З	
10	For me, my skin being damaged is:				
11	For me, sleeping well is:				
12	For me, my body adapting to HEN and not being able to eat again as before is:				
13	For me, chewing and tasting food is:				
14	For me, experiencing physical discomfort from feeding is:				
15	For me, my family keeping a closer watch over my feedings is:				
16	For me, limiting activities with my friends to those that are not related to food is:				
17	For me, being more concerned about my health is:				
			1	Fotal sum (1-17)	

Interpreting the Results

The NutriQoL® questionnaire results are scored on a scale from 0 to 100, with higher scores indicating better HRQoL.

Each category helps healthcare providers understand the patient's current quality of life and determine the necessary actions to improve or maintain it.

Initial Assessment and Follow-up Evaluations

For patients scoring in the poor or very poor categories, a detailed analysis of each item in the questionnaire should be conducted to identify areas needing improvement.

When the assessment is acceptable, good, or very good, the professional should conduct follow-up visits. During these visits, changes in HRQoL scores are compared to previous assessments.

A change of ±4 points indicate a significant variation in the patient's health status, prompting further clinical interviews and potential adjustments to the treatment plan.



- If the change produced is + 4 points, the result indicates that the patient's HRQoL has improved with respect to the previous measurement
- If the change is 4 points the result indicates that the professional should review the therapeutic guideline.
- If there has been no change in the questionnaire score, the professional should analyze the patient's previous score and according to his or her clinical judgment determine the actions to be taken.

References: 1. De la Cuerda C et al. Cuestionario NutriQoL®: desarrollo de un cuestionario específico de Calidad de Vida Relacionada con la Salud para pacientes con Nutrición Enteral Domiciliaria. 28th National Congress of the Spanish Society of Parenteral and Enteral Nutrition (SENPE). 2013. Nutrición Hospitalaria. 2013; 28(3). 2. Apezetxea A et al. Health Related Quality of Life in patients with home enteral nutrition in Spain assessed by a specific questionnaire: NutriQoL°. ISPOR 17th Annual European Congress. 2014. Value Health. 2014; 17(7):A518-0. 3. De la Cuerda C et al. Criterion validity analysis of a specific Health-Related Quality of Life questionnaire for Home Enteral Nutrition: The NutriQoL® questionnaire. 35th European Society for Clinical Nutrition and Metabolism Congress [ESPEN]. 2013. Clin Nutr. 2013; 32[1]:5217. 4. Apezetxea A et al. Reliability of a specific health related quality of life (HRQoL) questionnaire for home enteral nutrition (HEN) (NutriQoL® questionnaire). 36th European Society for Clinical Nutrition and Metabolism Congress (ESPEN). 2014. Clin Nutr. 2014; 33(1):5228. 5. De la Cuerda C et al. Inter-observer reliability of a specific health related quality of life (HRQoL) questionnaire for home enteral nutrition (HEN) (NutriQoL® questionnaire). 36th European Society for Clinical Nutrition and Metabolism Congress [ESPEN]. 2014. Clin Nutr. 2014; 33[1]:5230. 6. De la Cuerda C et al. Responsiveness and minimal clinically important difference of a specific health related quality of life (HRQoL) questionnaire for home enteral nutrition (HEN) patients; NutriQoL® questionnaire. ISPOR 17th Annual European Congress. 2014. Value Health. 2014; 17(7):A575. 7. Joyce CRB, Hickey A, McGee HM, O'Boyle CA. A theory based method for the evaluation of individual quality of life: the SEIQOL. Quality of life Research. 8. Cuerda C, Virgili N, Irles JA, Cuesta F, Apezetxea A, Casanueva F, Carrillo L, Layola M, Lizán L. Responsiveness and Minimal Clinically Important Difference of A Specific Health Related Quality of Life (Hrqol) Questionnaire for Home Enteral Nutrition (Hen) Patients: Nutriqol® Questionnaire. Value Health. 2014 Nov;17(7):A575 (Full text article). 9. Cuerda MC, Apezetxea A, Carrillo L, Casanueva F, Cuesta F, Irles JA, Virgili MN, Layola M, Lizan L. Development and validation of a specific questionnaire to assess health-related quality of life in patients with home enteral nutrition: NutriQoL[@] development. Patient Prefer Adherence. 2016 Nov 4;10:2289-2296 [Full text article]. 10. Apezetxea A, Carrillo L, Casanueva F, Cuerda C, Cuesta F, Irles JA, Virgili MN, Layola M, Lizán L. The NutriQoL® questionnaire for assessing health-related quality of life (HRQoL) in patients with home enteral nutrition (HEN): validation and first results. Nutr Hosp. 2016 Nov 29;33(6):1260-1267 (Full text article). 11. Cuerda MC, Apezetxea A, Carrillo L, Casanueva F, Cuesta F, Irles JA, Virgili MN, Layola M, Lizán L. Reliability and Responsiveness of NutriQoL(®) Questionnaire. Adv Ther. 2016 Oct; 33(10):1728-1739 (PubMed abstract). 12. Apezetxea A, Carrillo L, Casanueva F, de la Cuerda C, Cuesta F, Irles JA, Virgili MN, Layola M, Lizán L. Rasch analysis in the development of the NutriQoL[®] questionnaire, a specific health-related quality of life instrument for home enteral nutrition. J Patient Rep Outcomes. 2017;2(1):25 [Full text article)

French: Linguistic And Cultural Adaptation Of The Nutriqol® Questionnaire In France Using ISPOR Guidelines - Clinical Nutrition ESPEN Italian: Linguistic And Cultural Adaptation Of The Nutriqol® Questionnaire In Italy - Clinical Nutrition ESPEN

