SELECT ME

Telemedical Coaching for families with „Picky" Eaters" and Children with ARFID

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1. Introduction

NoTube GmbH was founded in 2010 as a spin-off start-up of the University Children's Hospital of the Medical University of Graz (Austria) and specializes in the treatment of early childhood eating (behavioral-)disorders including tube dependence.

Our interdisciplinary team has been working with the affected children and their families since 1985 (telemedically since 2000). The unique clinical experience of NoTube's staff has also led to a large amount of scientific research and international publications on severe eating and feeding disorders in infancy and early childhood over the course of more than 30 years. The goal of NoTube is to enable children with very different eating disorders to progress in their eating development and to enable everyone to have a sustainable and stable eating experience.

Some parents need special, more intensive care in order to achieve stabilization and support the transition to age-appropriate nutrition. Therefore, a telemedical coaching program was developed for these children, the **"Select Me"** program – this stands for *"Supportive Eating, Learning with Encouragement, Confidence & Training"*. This product is specifically aimed at families with children with highly selective eating habits (so-called "picky eaters") and children diagnosed with ARFID ("Avoidant Restrictive Food Intake Disorder"). The **"Select Me" is a three- month** program and can be extended as needed.

A great advantage of the online program is the treatment takes place in the family's own home home in the already familiar environment. This allows the family's daily routine—including work, childcare, and other responsibilities - to continue as usual throughout the program. It also protects children from potentially re-traumatizing hospital stays and reduces exposure to hospital-related germs, which can pose a significant risk to medically fragile children.
The NoTube team is an interdisciplinary team of experts in pediatrics, occupational therapy, physiotherapy, parent coaching and psychotherapy. This collaborative approach ensures that each child and family receives the individualized support they need.. The communication between the NoTube team and the parents works via specially designed and professionally managed online platform.

All telemedicine services of NoTube are separately protected and certified in accordance with ISO 9001 by Quality Austria GmbH and regularly audited. Since NoTube was founded, more than 1200 patients with various eating problems have been successfully cared for via our different online programs.

1.1 Theoretical Background

Getting to know and trying new foods is a natural part of eating development and promotes the child's independence. The choices of food offered and accepted is influenced by many individual and external variables for each young child. From a very early age, children deal with wanting to have (motivation), touching (tactile qualities), smelling (olfactory variables), and the sensorimotor activities of licking, biting and tasting new foods on a daily basis (Lau, 2016). The actual swallowing, i.e. the transport of food from the mouth to the stomach, is the last step in this complex

process. Unknown and completely new foods can trigger joy and lust, but also shyness, disgust or fear and thus promote selective eating behavior (Chilman et al., 2021).

Learning to eat therefore always happens alongside all these senses and eating behavior always develops multi-causally. Some of the many different influences on children's eating behavior are: individual *hunger-saturation regulation, motor skills, sensory perceptions* (taste, smell, sight, feel touch*),* initiative, *how familiar the food* is and family *cooking culture* among other cultural influencing factors. In addition, parental behavior and interaction, role models, pressure from experts, social ideas, fashions and ideologies, etc., also affect the child (Patel, 2020; Eriksson et al., 2012, AGES, 2020).

Parental factors such as the child's *confidence in eating independence* or intervening with every bite (interactive invasiveness) or insisting too early on table manners or the parental desire to eat everything that goes on the plate (meal arrangements) can also have a negative effect on the child's eating development (Henkel, 2016; Jacubeit, 2015; Rizzolatti et al., 2006; Bauer, 2006; Ellrott, 2016). New studies further confirm the influence of genetic factors, which can cause children to develop certain preferences as well as disgust (Nas et al., 2024).

So, if the child's eating development is different from "automatically by itself" and expected, e.g. due to an illness, other medical diagnoses (such as premature birth, etc.), possible additional physical accompanying symptoms such as underweight or overweight may occur. This can result in particular disturbances at the parent-child level (interaction level) and external pressures. Very often, a vicious circle arises that burdens both parents and children.

1.2 Our Philosophy – the Graz Model

Over the last 40 years, the "Graz Model" for eating therapy and tube weaning has been developed at the University Clinic for Pediatrics in Graz, Austria, by Univ.-Prof. Dr. med. Marguerite Dunitz-Scheer & Univ.-Prof. Dr. med. Peter Scheer. Since 2009, this model has served as the basis for NoTube GmbH in an out-of-hospital setting (Dunitz-Scheer et al., 2007; Trabi et al., 2010).

The model explicitly tries to move away from the socially customary error culture and deficit orientation (what does the child not do, want or eat) to an intuitive approach led by the child itself ("child-led" - how does the child eat) and to come to a neutral attention and optimistically-neutral evaluation of the child's behavior when eating. In this way, parents are also offered a new perspective. The aim of this model is that a reframing of perception, behavior and "mindset" should take place.

The "Graz Model" is based on three pillars (Dunitz-Scheer et al., 2007):

1. Making the child feel hunger– physiological component
2. Promoting child autonomy(independence)– Developmental Psychology Component
3. Reduction of the pressures of expectations as well as identification and avoidance of other influences and behaviors that negatively affect the child’s behavior.

2. Terminology: Selective Eating – Highly Selective Eating Disorder - ARFID

A. Selective Eating Behavior

Selective eating behavior can be natural and helpful, but it can also cause stress. From an evolutionary point of view, selective eating behavior or "picky eating" has always protected people from consuming inedible or toxic foods. In a way, every person is selective and, with an almost unlimited abundance that we are surrounded with in our modern life, often consciously or unnoticed, narrows down his or her own choice of meals in daily life. However, the number of children with selective eating behaviors has increased significantly in recent decades and has become a problem for many in the face of growing food ideology and advertising. For example, almost half of the children show abnormalities, need safety when eating and eat selectively (Cardona et al., 2015). The phase of selection and getting to know new things is particularly pronounced around the 2nd to 4th year of life, as well as around the 6th and 10th year of life. This often happens in times of change (e.g. autonomy development, puberty, etc.). This is also referred to as "neophobia" ("the fear of the new"). Eating the same foods every day provides security, particularly in these stormy times (Renz-Polster, 2022).
Selective eating behavior is often common in certain families and is not a disease per definition. It is usually not accompanied by nutritional deficiency symptoms or a problem to thrive and in most cases subsides without conscious intervention (Chatoor, 2009, Renz-Polster, 2022). Some individual food preferences are stable throughout life and have no disease value (e.g. no seafood or the preference for certain flavors).

Case study – Selective Eating (Emma, 6 years)
Emma eats only a few foods such as toast, various pasta and applesauce. She rarely tries new things, but occasionally shows interest in them at the family table and then looks with interest, but doesn't want to try any of it. She avoids certain consistencies, such as soft cooked mushy vegetables. Parents are concerned about a more balanced diet, but are now not putting any pressure on her. The father remembers eating very similarly to Emma as a child, and therefore sees hardly anything problematic. After puberty, many things changed and normalized for him. Emma has no medical findings, she is doing well and the growth development seems undisturbed. One observes and expects a similar development to her father.

B. Highly Selective Eating Behavior

If selective eating behavior manifests itself as an issue or problem and as a specific characteristic of a child and is not temporary and/or even intensifies over time, it is referred to as highly selective eating behavior, which is classified as a disorder. Wolstenholme et al. (2020) were able to show that a highly selective eating disorder usually begins in infancy and often occurs "out of nowhere". Around the age of 18 months, there is an accumulation and in the course of time, the selection of "edible" foods becomes steadily less and the children even more (highly) selective. Highly selectivity can, but does not have to, affect several areas (Chatoor, 2009, Marinschek & Pahsini, 2016, DC 0-3 R 2005 and DC 0-5 2019).

Typically, the following areas can be experienced as highly sensitive:
1. Smell (heated oil, cheese, meat, fish, pickled vegetables, etc.)

2. Taste (e.g. only sweet, spicy or sour foods),
3. Texture (e.g. only mushy or crispy foods),
4. Shape/colour (e.g. only white, red or yellow foods, certain shapes),
5. Brand (only a certain yoghurt, with its own look and of a certain variety).

Depending on how severe the characteristics are, affected children can sometimes even develop specific nutritional deficiencies. If children eat mainly liquid food (e.g. with a balanced high-caloric drink), no deficiency occurs in terms of nutrition, but many important steps in eating development are not occurring and completed. For these children, oral development suffers greatly as well. Most of these children are of normal weight and boys are more likely to be affected (Marinschek et al., 2016). Highly selective eating behavior can be favored due to a "perceptual disorder" (smells, textures and colors). Other common diagnoses that are frequently associated with highly selective eating behavior are: autism spectrum disorders (ASD) and attention (hyperactivity) disorder (ADHD). Children born prematurely also show a higher risk. The parental and child suffering varies greatly, so that there is either no or very much desire for change and differing pressures and expectations. The more flexible a person eats, i.e. the fewer routines he or she needs, the less likely highly selective eating behavior will occur (Foinant et al., 2022). As mentioned, genetic predisposition also plays a role in the development of highly selective eating behavior (Nas et al., 2024).

Case study – Highly selective eater (Jakob, 6 years old)

Jakob only eats pasta without sauce, sour cream chips and the vanilla pudding of one specific brand. He consistently refuses new foods – even smells or the sight of new food can trigger disgust. When he is asked to try new things, he gets visibly angry, is desperate, screams, cries and runs away. When invited on excursions, where his safe food isn't available, he doesn't eat anything at all and withdraws socially. As a result, he can only come along for short events and trips. The parents are desperate, have tried everything and now have resigned to only cook his "safe foods". Daily meals are defined by conflict and or resignation. He usually eats a little better with his grandparents. He hasn't gained any weight for many months. The blood values of iron are reduced; vitamin D deficiency is apparent. Outpatient diagnostics and specific treatment are recommended, especially due to the high level of parental suffering.

C. ARFID – "Avoidant Restrictive Food Intake Disorder"

Since 2013, the DSM-V "Diagnostic and Statistical Manual of Mental Disorders" (5th edition) and the ICD-11 (International Classification of Disorders, 11th edition) since 2025 are describing ARFID – "Avoidant Restrictive Food Intake Disorder" as a new diagnosis. This diagnosis according to the manuals (regrettably) includes almost all types of feeding and eating disorders, as well as tube dependence and thus also highly selective eating behavior!

The diagnosis ARFID does not restrict itself towards a limited age group and covers the entire lifespan. Diagnostic criteria for "ARFID" according to DSM-V (American Psychiatric Association, 2013) as:

"An eating or feeding disturbance (e.g., apparent lack of interest in eating or food; avoidance based on the sensory characteristics of food; concern about aversive consequences of eating)

as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with one (or more) of the following:

- Significant weight loss (or failure to achieve expected weight gain or faltering growth in children)
- Significant nutritional deficiency.
- Dependence on enteral feeding or oral nutritional supplements.
- Marked interference with psychosocial functioning."

The nutritional deficiencies with ARFID can under certain circumstances be life threatening and significantly impair social participation (e.g. participation in family meals, celebrations, sleepovers and time with friends). The restrictive aspect of this disorder can lead to the following symptoms: weight loss, growth contrary to expectation, significant nutritional deficiencies, dependence on nutritional support and/or a pronounced disorder of psychosocial function. The food restriction is *not* caused by the unavailability of food, a cultural practice (e.g., religious fasting), physical illness, medical treatments (e.g., radiation therapy, chemotherapy), or any other eating disorder — especially anorexia nervosa or bulimia nervosa. The perception of body weight or body shape is not disturbed.

If ARFID is diagnosed, the manifestation of *physical illnesses as well as other mental and psychiatric disorders that affect appetite and/or food intake (including other eating disorders, depression, schizophrenia and factious disorder) must be excluded through careful and targeted diagnostic).*

Case study – ARFID (Lukas, 7 years)

Lukas completely refuses any solid food and has been eating only a certain liquid food from his special blue bottle for almost 3 years. No other drinking vessel is allowed. At the table, even the smallest amounts of new and non-safe food on his plate trigger anxiety, coughing and gagging. Over the last year he has lost a lot of weight. He is already physically weakened and therefore had to be exempt from gymnastics. He avoids social situations that involve food completely. The parents are under a lot of stress, feel responsible and helpless. In contrast to the highly selective eater, Lukas has massive psychosocial limitations. A specialized center diagnoses ARFID. In this case, therapeutically targeted intervention over a longer period of time is urgently necessary.

3. The Select Me Program

The program provides guidance and treatment for children with highly selective eating behavior ('picky eaters') as well as those with ARFID.
It is divided into two elements:

1. Preliminary medical diagnosis (assessment)
2. Online Coaching – Select Me Program

3.1 Preliminary diagnosis/ assessment

Through a telemedical preliminary assessment, we carefully evaluate whether this program is the right fit for your child. To do this, we use a standardized questionnaire that gathers information

about medical diagnoses, birth history, growth, current nutrition and eating behaviors, as well as your child's overall development and therapeutic supports. This information—together with physician letters, therapy reports, and uploaded videos of play and eating situations—forms the basis of our clinical recommendation. After reviewing all materials, we provide parents with individualized feedback regarding their child's suitability for the program.

3.2 Online Coaching – Select Me Program

After the positive assessment of the suitability, families are enrolled in our secure online communication platform. Through this platform we will have daily written communication with each other. The attending pediatrician conducts medical rounds and oversees each child's progress. The treatment team has access to the child's medical file on the platform, including photos, diagnoses, weight history, nutrition protocols, and other relevant information.
The program consists of three phases: an initial 'getting-to-know-you' phase, an active treatment phase, and a final phase that focuses on planning for life after the program. Throughout the online consultation, parents receive guidance on mealtime behavior, food selection, food presentation, and related topics—creating an ideal environment for learning and supporting changes in eating behavior. During the program, parents have the opportunity to submit daily nutrition logs and videos of the child interacting with food, and a brief daily progress report. They can also ask questions at any time, which are answered daily by NoTube experts, including on weekends and holidays.
In addition to support provided through online platform, individual consultations take place at least 1-2 times a week via video conference. These sessions offer insight into each child's progress and can also serve as therapeutic appointments in which the current situation is discussed. During these meetings, experts can provide recommendations and directly observe the child—such as parent–child interactions, expectations, or ways to optimize the eating environment. Depending on the family's needs, these sessions may be educational, therapeutic, or medical in nature. The program also includes group sessions in which several families participate together. These sessions may include sensory activities for the children, guided discussions among parents, and psychoeducational input provided by our experts.
The treatment goals are defined clearly and individually at the start of the program. Our team supports families on a daily basis, drawing on many years of experience to help each child take the next step in their eating development. The care lasts three months and can be extended if necessary.

Services at a Glance
Acces to our secure online communication platform
Regular analysis of nutrition logs and videos
Daily written communication with a team member and online rounds
At least 1 to 2 meetings per week via video conference
Additional group formats via video conference

4. Advantages of Telemedical Care

The benefits of the Select Me program can be summarized as follows:

- The telemedicine **offer can start immediately** - there is no waiting time.
- The child **remains in a familiar environment**, avoiding potentially stressful or unpleasant visits to doctors or therapy settings. This supports a more efficient and effective therapeutic process. **No risk of infection** compared to inpatient treatment.
- **No travel and accommodation costs** - easy to integrated into everyday life.
- **Treatment costs are much lower** than in an inpatient setting.
- The family **receives daily support**, including weekends and holidays, from the NoTube team as needed.

5. Costs

5.1 Costs for Preliminary Diagnosis (Assessment) and the Select Me Program

The current costs can be found in the separately attached cost overview. Pre-diagnosis/assessment and the Select Me program are separate services. The program fee is a flat rate, services provided but not used will not be refunded. The treatment can start immediately after payment.

5.2 Reimbursement of Costs / Health Insurance

The services are carried out exclusively by experienced and qualified personnel. The decisions the reimbursement through health insurance companies is solely theirs and a case-to-case decision over which we have very little influence. After a preliminary diagnosis, the families can receive a letter from us regarding cost coverage and the documents for submission to the health insurance company. Throughout the years of our online practice, more than 30 health insurance companies worldwide have already covered the costs of NoTube's programs. The reimbursement eligibility of NoTube's telemedical programs depend on the country, health insurance company and ultimately the child's medical history. The documents must be submitted in accordance with the guidelines of the health insurance company before the start of the program.

6. Literature

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7. Imprint

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Version: December 2025