Grinding jaws

Eating viewed from a psychological developmental perspective

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Eating can be considered to be a developmental task. You have to learn to eat: how, when and what. While the body and body reflexes are prepared to receive and process food, the act of eating itself is not inborn as such and is an important educational target. This task passes through different stages and the way in which a stadium is passed through, influences further development. To be able to map the issues of eating disorders and overweight, it is necessary to view eating as a developmental task. In this article, eating is viewed as a developmental task in the different phases of life.

In the process of growing up, human beings carry out several developmental tasks. A number of tasks have to be mastered, and while the child is growing up, the different subjects are being refined. A developmental task is being shaped within the context in which the child grows up, and children perform these tasks within an environment and in interaction with this environment. In the course of time a number of tasks have already been identified and these have been brought together in table 1.

Table 1: Developmental tasks of the young child (from birth to five years), (Delfos, 2015).

Developmental tasks of the young child (from birth to five years)		
autonomomy	eating independently, becoming toilet-	
	trained, falling asleep	
motor function	to move free and independently	
intellect	to systemize, conservation-principle, space	
	and distance, thinking from concrete to	
	abstract	
communication	linguistic competence	
emotions	to attach to another and attaching the	
	other to oneself	

The independence of the child, his or her autonomy and emancipation have always been a subject of discussion. Ariès (1962) demonstrates that modern man no longer sees the child as an immature, not fully grown miniature adult, but as a human being with it's own characteristics and it's own needs. Nevertheless it takes until the end of the twentieth century that the child really becomes the centre of attention (Delfos, 2001) and that the rights of the child are accepted worldwide (Convention on the Rights of the Child (1989). The motor skill development has been charted very accurately by particularly Gesell (Gesell, Ilg,

Learned and Ames, 1943). The intellectual functioning has been charted for example by Piaget (1972) and Montessori (1964). The *linguistic competence* has been charted mainly by Montessori (1964) and Chomsky (1975). The development of *attachment* has received a great deal of attention from the moment Bowlby (1907-1990) developed his theory of attachment (1984). The *act of eating* as a developmental task has not yet been the subject of psychological study. Nutrition itself, of course, has extensively been examined in the medical world, especially the necessity of different nutritional substances at different ages. In table 2 the act of eating has been arranged as a developmental task in perspective of the tasks in different ages.

Table 2: Eating as developmental task

The act of eating as a developmental task		
1	Birth to 6 months	understanding each other's language
2	6 months to 1 year	separating eating from comfort
3	1 year to 2 ½ years	eating independently
4	2 ½ years to 3 ½ years	learning to delay the satisfaction of needs
5	3 ½ years to 7 years	discovering the pleasure of motor function
6	7 years to 10 years	discovering the social environment
7	Pre-puberty	growth-acceleration
8	Puberty	new needs, new demands

In this article an attempt is being made to place the act of eating in a developmental psychological perspective. This has consequences for the way in which we handle food with our children. This model can also function as a starting point for the treatment of eating disorders and for managing the changing food-intake which leads to overweight in an increasing part of the world in children and adults.

Understanding each other's language

After birth the child is still limited in his or her possibilities to ingest food. The solution nature provides for this is breast-feeding. This kind of food is the most fitting because it contains nutrients that the child needs. The processing of the food has not fully matured at birth; in particular the immune-system still has to mature. This means that the child cannot begin to eat any food. Children who mature late in this respect can eat solid food only much later and they often develop an aversion against food that has been offered to them too early. The type of food-allergy which is a part of the atopic syndrome can be characterized as an immaturity of the body, more specifically immaturity of the immune system (Delfos, 2012).

To regulate the receiving of the food, the newborn child has only control over very few means. The most obvious one is crying. In fact, by crying the child speaks a hundred languages, but in the first half year parents and child must still learn to understand each other's language. Crying has a lot of different meanings and as a result drinking can be conditioned to fulfil several functions. The different functions that drinking can have during the first months have been put together in table 3.

Table 3: Functions of drinking during the first half year



- 1 Intake of the necessary nutrients
- 2 A way to satisfy hunger
- 3 Comfort
- 4 A way to keep the attachment-figure nearby
- 5 A way to fall asleep

The necessity to ingest nutrients (3.1) is only part of the drinking-activity. The percentage of women who breast-feed on an exclusive basis remains more or less the same over the years, but giving any breastfeeding increases (Newton, 2004; Ryan, Wenjun en Acosta, 2002). The length of the period children are breast-fed does not seem to increase over time (Newton, 2004; Ryan, Wenjun en Acosta, 2002). Still, breast-feeding for a longer period of time, even when the child is five years old seems to occur more often. Those who are breast-fed probably receive the breast more often. Parents use food as a means of stopping the baby from crying, as crying seems to become more a problem than ever. The same can be said for bottle-fed children. They too seem to receive food as an answer to crying, also when the crying does not mean 'I am hungry' but 'I want to sleep, let me be!'

Zwart and Brand (2004) discovered that parents and children can develop a situation of excessive crying in the baby as a result of the stress interaction between the baby and the mother. When the baby was put apart from the mother within a very short while the child regained a normal pattern of sleeping and cried very little.

This change in the way children are breast- and bottle-fed means that food-intake becomes associated to many factors than only the necessity of food-intake. The drinking also means the satisfying of a hungry feeling (3.2) and as a result psychological experiences and physical experiences get mixed up with each other. The breast or the bottle is also being given to provide comfort (3.3). Using the breast is even easier than the bottle, because the breast is always present and the food in the bottle has to be prepared first. In this way comfort and food-intake or even the smell of food can be associated with each other at a very early stage. Here we already see the development of a pattern that can become problematic later on. The child does not particularly ask to be breastfed in order to be comforted, but in the beginning the baby does not know any other language than crying. The young parent does not easily understand the child's language and cannot easily appraise the different ways of crying as 'hunger' or 'wants comforting', 'tired' or something completely different. The drinking also keeps the attachment-figure nearby (3.4). For the helpless child this is of fundamental importance. The child wants the parent nearby because this parent must be able to help in case the child is in need. This need for proximity is one of the core concepts of the attachment theory (Bowlby, 1984).

We see this very core principle demonstrated when we look at the behaviour of toddlers with their mothers. A toddler can play very contently, without paying too much attention to his or her mother, as long as this mother is sitting on the couch watching her child. As soon as the mother wants to read or answers the telephone, the child tends to abandon his or her own play in order to mobilise the attention of the mother. The reason is not the need for attention – the toddler forfeits his or her own pleasant game on the spot – but the child infallible knows that a mother with a book or at the telephone is not entirely focused on the child. This is 'dangerous' for the child because the child needs the proximity of the mother in



case of emerging problems. This is the very core of the matter concerning attachment: availability in case of need (Bowlby, 1984).

When the child is still very young the mother gives all sorts of signals that she is still directed towards the child by keeping contact with the child and by saying that she still sees the child and is keeping an eye on the child. The mother – or the father – stays in contact with the child while reading or on the telephone, so that the child learns that the parent will always give priority to the child's need and will keep an eye on the child in order to give help when needed. The child will continue to seek for attention in the sense of total availability, until the child understands and knows that it can always mobilise the parent in case of emergency. This way the child learns that the mother always has an extra sense for her children and the child can therefore always count on her. In the first six months the baby obtains proximity of the attachment-figure mainly by crying, by smiling and by grasping (Bowlby, 1984). When one understands what the function of this behaviour is, one can display the behaviour that is necessary to help the baby more easily, and that could be rocking the cradle instead of feeding.

A fifth function of drinking in the first half year is to fall asleep (3.5). After birth, the child still has to develop the sleep-through-phase in its brain, which can connect the different parts of the sleep through which it is possible for the child to sleep (Guilleminault, 1987). Certainly during the first three or four months the child does not have many strategies to fall asleep by itself. The baby does not have much control over movements; the baby cannot roll its head, rock to and fro, stick a thumb in its mouth, play with its feet or clamp a spoon with its mouth to foster a kind of hypnotic trance that enables the child to fall asleep. It takes three of four months to master motor functions enough to be able to do this. The research from Hadders-Algra (Hadders-Algra, Klip-Van den Nieuwendijk en Eykern, 1997) even shows that through observation of the movements that are no longer involuntary at three or four months, brain disorders can be detected.

In fact drinking is the answer to the many questions the child asks in the same way: by crying. The parents need to learn to distinguish between the different kinds of crying of the child in order to discover its need and to be able to respond to that. The baby on his or her part is directed towards the human voice and goes all out to understand and to mimic the human sounds (Sander, 1974).

Separating eating from comfort

In the second half of the first year the developmental task with respect to the act of eating consists of that the child has to learn to separate comfort from food. The child has to discover and develop alternatives for comfort. Sleeping and eating must be separated too. Being very young, the baby still scarcely has possibilities to fall asleep by itself. To cry itself asleep is one of the few possibilities the baby has. But for parents this is a problem. First of all the 'young' parent can still poorly distinguish what the crying of the child means, secondly it is the case that the crying in itself is a heavy burden for the parent. The parent wants the child to be happy and for the parent a crying baby is tiring, particularly if that parent has been sleeping poorly for a number of nights and has to work during the daytime. But even sleeping is a developmental task that the child has to master and for which the maturation of the central nervous system – brain and nervous tracts – is necessary.

With respect to the development of the child there have always been distinguished two factors: predisposition and environment. Each period had its own focus, swinging from



nature to nurture, in determining which factor was predominant in the development of the child. This was called the nature-nurture controversy. This controversy seemed resolved when both factors were put into interaction with each other. But even that is not sufficient. A third factor can be distinguished: the maturation of the central nervous system (Delfos, 2012). This maturation is of enormous importance and continues for more than 25 years on after birth. We see the workings of this factor with children who have been severely underfed the first year of life. The consequence of this is not just that these baby's are skinny, but also and foremost that these baby's have an underdeveloped nervous central system. The epigenesis of the brain is hampered. The corpus callosum in the middle of the brain connecting all parts of the brain with each other, part of the 'telephone-exchange' of the brain so to speak – increases in the first year with 42 percent (Ramaekers en Njiokiktjien, 1991) and another 110 percent between one year and twenty-eight year. In the first year an important amount of maturation takes place and amongst others the maturation of the sleeping phases. Newborns start their sleep with REM-sleep – dreamsleep – (Guilleminault, 1987). This kind of sleeping decreases when one gets older. With *prematures* (babies born too early) 80 percent of the sleeping time is REM-sleep; with a terme (on time) born the REM-sleep consists of 45 to 50 percent of the sleeping time; with six months this is even 30 percent and with adolescents and adults it is 20 to 25 percent. The total sleeping time declines the older one gets. Between birth and three years the amount of sleep decreases on average with 6 hours. The NREM-sleep - not dream sleep - changes as well. The NREMphases 3 and 4 – amongst others the sleep-through-phase, the connection between two sleep phases through which one does not have to wake up – only comes into existence after about six months and take up at last 20 percent of the total sleep duration; in adolescents this is only 10 percent and in elderly above 50 years the NREM-phases 3 and 4 are entirely absent. Some disorders (sleepwalking, pavor nocturnes) are connected with these sleeping phases 3 and 4; at a more advanced age they usually disappear automatically. So sleeping is a task which the child has to perform while it still has to mature its brain in this respect. Both to fall asleep as well as to sleep through are difficult. At the same time sleep is necessary to mature. A feeling of security is needed, the right temperature, but also a form of trance by which one can fall asleep and can sleep through. This is originally the reason why the cradle has been developed, and why lullables are sung. It requires from the parents that they help the child in its trouble to fall asleep: to rock is a verb! This difficulty to fall asleep engenders the danger of too much (breast)feeding. For children it is often easier to fall asleep in the warm safety of the mother's body with the familiar smell and with the mouth at the food-supply: the breast. To give the breast can be used to let the child stop crying and to get it to fall asleep. This way the food gets related to comfort and sleepiness. This association can become a conditioned respons for later food-intake in case of unpleasant feelings and in distress. With young children this association gets reinforced even further by the 'sweet for the pain'. If this becomes a strong association, the child could be at risk to develop overweight. The increase of type 2 diabetes in young children, even very young children (Hanas, 2001), could partly be explained from this conditioning process. To learn how to dissociate comfort, sleep and food is an important task for the second half of the first year. The baby has to learn alternatives for comfort. This starts from three or four months on as the baby gets more control over his or her movements.

Eating independently



From one to two-and-a-half year the child is busy learning to eat by itself. It means that the child can exert more power over what and how it eats. Because there has to be eaten a lot more in the first year due to the important increase in growth (Virgilio, 1986) the transition for parents from tot dependence to more independence in eating is often difficult. They see their child eat less than before and attribute it often to the 'impertinence' of the child instead of a lesser need for food intake. The amount of food must be adjusted to the growth and in first instance this means a decrease in the amount of food after one year of age. During this phase the child also discovers the huge variation in food: a horn of abundance. The child learns about healthy and unhealthy food. It learns that one kind of food is desired by parents and the other undesired. The child eats together with the parents and discovers that parent can eat other food. The child learns to eat candy and has to learn how to cope with abundance and limitation. The child can get food easier by itself by taking it or can mobilise the adult because it begins to control language and understands more and more how the adult can be manipulated. Already very young, children can appraise the behaviour of adults, and understand that adults can behave from false beliefs (Onishi and Baillargeon, 2005). So, the thinking of the child becomes more and more independent from the adult. The child also learns that there are rules with regard to food and that there are table manners. The increase of motor function also means that there are more demands regarding food. It is the period in which what child really likes becomes very clear. The 'boy with the salt' demonstrates that the inner wisdom of the body sometimes can be another one than that of the parents and carers.

A boy had a great need for salt and did everything to obtain it. He licked the salt off crackers. Whatever his parents did to hide the salt, the child climbed, searched and ate all the salt he could lay his hands on. At the age of three and a half, he was admitted to hospital where he was given a standard diet with normal salt levels. His desire to eat salt was disregarded. After seven days the boy died. Post-mortem examination revealed that he had an anomaly (adrenal deficiency, Addison's disease) obliging him to take up salt externally or die, which indeed turned out to be the cause of death. Until being admitted to hospital, the boy had managed to keep himself alive by taking in extra salt. His body's internal wisdom had shown him what behaviour was necessary (Wilkins, Fleischmann and Howard, 1940; 1962; Gray, 1999).

In this respect it is interesting to report that children with autism, who can be looked upon as children with a delayed development in specific areas (Delfos, 2018), often have an onesided eating pattern, but they are surprisingly healthy despite the 'unhealthy' eating pattern (Wing, 2001). Possibly, their deviant development engenders a deviant feeding pattern. The development of language and motor function gives the child a feeling of power and after the long period of powerlessness the child expresses this by saying 'No!' time and again. With this it announces the period of stubbornness.

Learning to delay the satisfaction of needs

The period from two-and-a-half to three-and-a-half years is called the stubbornness period: 'the terrible two's'. During this period the child attempts for the first time to gain total autonomy. With the linguistic 'No!' the child can voice a protest with the very instrument of the adults: language. The child has gained a lot of possibilities to make sure that his or her needs are fulfilled. It also means that it has to learn the boundaries to its own gratification of



needs and the boundaries of the other person. The child can eat by itself, but he or she can also refuse to eat. The digestion system matures in processing increasingly complex and more specific food during the first year. For example, most children do not like Brussels sprouts and adults do. During the cooking of Brussels sprouts gasses are released that the body of the child cannot easily process. So it is 'wise' of children not to want to eat Brussels sprouts. Also, the child comes more into contact with food that does not serve a function as nutrition but fulfils a function as a delicacy in bringing about a pleasant feeling or in being active in the dimming of unpleasant feelings. Especially candy serves this function. Children also learn an additional function of candy, namely that parents use this to comfort the child or to make the child stop displaying unwanted behaviour. The child learns that a lot of candy can be obtained near the cash register in the supermarket and that the parent does not easily have an answer if the child throws a temper fit in the supermarket. Through candy the parent manipulates the child, and the child manipulates the parent. When there are only few alternatives to remove the unpleasant feeling, candy will play an important role. Rha (2000) discovered that a positive education by the father has positive effect on the capacity to delay gratification of needs.

An important developmental task for the child is to learn how to handle unpleasant feelings by itself in this phase. Not all of his or her needs can be satisfied or be satisfied immediately. The developmental task by excellence during this period, also with regard to food, is to learn to delay need gratification and to control impulses. It is difficult for parents; the child seeks the satisfaction of his or her needs and does not easily accept the boundary the parent sets. Nevertheless this is maybe one of the most important educational values the parent can develop in his or her children: impulse control. The beginning of spoilt behaviour, ADHD-like behaviour and egoistic behaviour, apart from predisposition and other factors, finds it's origin in this period. ADHD (Attention Deficit Hyperactivity Disorder) is a problem of the maturation of the central nervous system (Delfos, 2012) and is being characterized by hyperactivity, disturbance in concentration and impulsiveness. However, impulsiveness can also be stimulated by a lack of educational training how to control and control impulses during the stubbornness period. The Candy-reward-test (Mischel, 1958) learns us how important this is. It is a simple 'test' which predicts social and intellectual success better than for example an intelligence-test (Shoda, Mischel en Peake, 1990). It simply is about presenting the child with the following question: do you want a piece of candy now or two pieces of candy later. A child who can delay the need for one piece of candy now until 'two later', has a better prognosis of success than a child that make the choise for a piece of candy now. That this simple test has such a predictive value is not surprising. There are six important factors playing a part. They are placed together in table 4.

Table 4: Candy-reward test, factors playing a part

Candy-reward test factors

- 1 Capacity for planning
- 2 Capacity for delaying gratification of needs
- 3 Developed frustration tolerance
- 4 Sign of thrust in adults
- 5 Capacity for assessing social interaction
- 6 Development of time perception



To be able to choose for two pieces of candy later the child has to be able to plan and be able to hold on to the plan (4.1). This concerns the 'executive functions' (Pennington and Ozonoff, 1996) which are of importance for the regulation of behaviour and are associated to intelligent functioning. The child has to delay gratification of needs (4.2) which has already been evoked by the proposition, the 'water is already in the mouth'. Some frustration tolerance must be developed (4.3) to enable the child to handle this frustration of not getting the piece of candy immediately. If the child makes the choice to have the two pieces of candy later on, it also has enough trust in adults (4.4) that they will keep their promises. The is one of the criteria of a *secure attachment* (Bowlby, 1984) which is important for the development of a healthy personality. The child must also able to interpret social interaction (4.5) in such a way that the child knows that the adult is serious and that the proposition of two pieces of candy later on is not a joke. Finally, the child must have developed some sense of time (4.6) to be able to place 'later' in a timeframe. This is also an executive function and the hampered development of time.

The candy-reward test has also been applied to children with ADHD. These children have a problem with impulse control and show impulsive behaviour. As predicted, these children chose the quick small reward more often than the postponed bigger reward (Rapport, Tucker, DuPaul, Merlo en Stoner, 1986; Tripp en Alsop, 2001).

Pleasure from the gratification of needs by way of food is primal and fast. The same thing happens with buying things without money and making debts instead. Structurally solving a problem of gratification of needs often requires a more long term thinking and planning. For those who are underprivileged, short term is a more prefered solution. Overweight is mainly the result of too much food-intake, and the choice for a direct pleasant feeling, not being able to delay gratification and not able to find alternative ways of getting a pleasant feeling.

In this period the child learns how to distinguish hunger from appetite. Because it gets served food that is a delicacy and not necessary, it develops an appetite for candy and snacks. This appetite asks for satisfaction, just like hunger does. In this period the parents are actively explaining the child that is does not have hunger, but an appetite, so that the child is able to distinguish these physical processes.

In addition the child is exploring the world and he or she becomes more and more active. The child experiences that food and energy are connected, and that the amount food is not a fixed quantity, but that it depends on what one does during the day. The importance of food have becomes clear to the child.

Discovering the pleasure of motor function

The increase of control over motor functions means that the child is discovering more and more physical possibilities. The period of three-and-a-half years to seven years is being characterised by the discovery of the vast possibilities of motor function. Because of this the connection between food-intake and energy consumption becomes much more clear to the child. Acute rising hunger after intensive movement learns the child the meaning of food as an energy source.

There is a difference between boys and girls in the extent and manner of activity. Boys are more inclined to action, from deriving pleasure in moving to solving problems. Boys also measure themselves readily to danger in order to create a feeling of safety and invincibility by overcoming the danger (Delfos, 2018).



To be physically active is healthy, but only to a certain degree, and to be physically active in order to correct weight in fact is not good. It has the effect of two assaults on the body: first having to process too much food and then receiving too little food while active because the body has to loose weight.

Discovering the social environment

In the period from seven to ten years old, the exploration of the social environment is at the centre of attention of the child. At school the child has lengthy contact with peers; therefore the comparison with others becomes possible on a large scale. Also the act of eating takes place in more varied situations, when the child stays behind at school or when the child is eating at a friends place. On the crèche the food of the child still is strongly determined by the parents, but this changes when the child attends school. The child has new opportunities for autonomy in eating, it can even throw food away. The parental food is being checked against the food that the child gets elsewhere. Also, commercials directed at the child as consumer has a more direct influence. From the parents it requires that they hold on to their own standards and values and dare to set boundaries for the child. The stronger the development of identity of the parents is, the more possibilities the parent has to protect their child from the intrusion that the school, friends and media makes on the family and the child within the family. The extent in which parents communicate openly and with interest (Delfos, 2000) is of great importance for the way the child places the family in the social context.

Pre-adolescents: growth acceleration

From eleven to about fourteen years children find themselves before the entrance of puberty: the pre-adolescence or: pre-puberty. Physical changes take place that announce puberty. Most spectacular is the growth, which sometimes takes place within a very short time – the spurt of growth – and the child develops itself from a child into a young adult. At the end of primary school, at the senior year production, we often see dressed up children with make-up who in a flash show their future adult appearance. Growth does not only means also development of the secondary sexual characteristics, the adrenarche matures at about ten years (Herdt and McClintock, 2000) by which the hormone levels are being changed, and the brain goes through a spectacular growth (Strauch, 2003). To be able to grow, more food is necessary. With boys especially the muscles develop, with girls fatty tissue is being formed under the skin which provides for more feminine curves . For girls the spurt of growth often is more difficult than for boys. An early spurt of growth is accepted more in boys than in girls. As a result, eating problems can arise. This is especially the case with anorexia nervosa. This disorder is in principle controlled by predisposition (presence of the AgRP-gen – aguti gene – which controls the production of the SLC-1-molecule in the brain as well as the production of ghrelin, the appetite hormone) and it develops in interaction with de environment (Delfos, 2011). The first critical period for anorexia nervosa is around eleven years when more food has to be taken in and the child can do this insufficiently because of a deficit of the production of the Scl-1-molecule, the ratio foodintake/energy-display is too sharply tuned. Anorexia is in fact a 'too sharply tuned motor', by which the contradictory signals in the body arise of having eaten enough and not having eaten enough. For early recognition the eating pattern of the child is important and particularly the transition to more food-intake during prepuberty.



The second critical period for anorexia nervosa is puberty when adolescent girls are going on a diet and girls with anorexia are too severely dieting The third critical period for eating disorders is from about thirty-five years when the metabolism is slowing down and less food is needed. The last is particularly problematic for women with a predisposition for obesitas.

The end of primary school is the period that children in their moral development focus at 'being a good child in the eyes of society' (Kohlberg, 1969). During this period children are sensitive for social values and role models. Children are busy exploring how society looks at different subjects, ranging form sexual education to discrimination. With regard to food the child is extra sensitive to information, also about food. Emphasis on role models who are very slim, can stimulate children to display unhealthy eating behaviour. Research (TNO, 2005; Crone, 1999) shows that girls (13 to 18) diet a lot, and in an unhealthy manner. The child will encounter severe medical problems after a while, when predispositional factors like anorexia nervosa are present. The child will also place food in a social conduct of behaviour. With this interest for social information the foundation is laid out for puberty when children are taking their own points of view.

Puberty: new needs, new demands

Puberty sets new demands to the child and to his or her environment. In a few years time the child transforms in appearance as well as in tasks into an adult. Puberty is a turbulent period is the sense that parents and children have to adjust to the changing roles, but also because enormous changes are taking place in the brain and on a hormonal level. The adolescent can grasp things he or she never could understand before and has a sharp sense of increasing intelligence because of which he or she sincerely thinks that he or she knows and understands everything (Delfos, 2019).

The changing body also has new needs. This period deviates from all other life phases. Therefore it is not simple to give advise about good food and youngsters often turn down adult advice, and maybe that is even sensible. The question is what is wise. During adolescence fat snacks and chocolate do not have the same effect as during other life phases. Possibly, the body asks for extra substances that would be too much in another period. On a hormonal level the adolescent finds him- or herself in a lightly psychotic condition, like being in love also does. This has consequences for the appetite and the sort food that is needed. Possibly, the body tracks down 'anti-psychotic' food, just like people do who end up in a psychosis suddenly often eat enormous amounts of fat or sugar, trying to 'eat up' against the overwhelming psychotic condition that announces itself.

The changing condition of the body, including the brain, brings about new challenges and new demands. The adolescent wants to experiment, particularly between the fourteen and sixteen years. Parents have to 'sit trough' this period so to speak. The adolescent often listens more to friends than to parents and looks up the boundaries. Especially boys go further another step than before in measuring up to danger. Children are more at risk of becoming addicted to cigarettes, alcohol or drugs during puberty than during any other life phase. Especially important during adolescence is the risk to become isolated from adults. Adolescents need adults to sharpen their thinking and to keep track of reality. However, adults have the tendency to put the brains of adolescents on 'hold' in communication with them by telling their own story, by 'preaching' like the adolescent often puts it (Delfos, 2019). The adolescent is better protected when the adult does not so much talk as well as ask the adolescent questions and keep the thinking process of the adolescence active.



Concluding remarks

Learning how to eat is a developmental task and a life task. The older we get, the more unstable the balance between food intake and energy consumption becomes. Every phase of life has special characteristics in developing a correct food intake. In this article food is mainly viewed as a development task and so the course of this is being viewed during youth.

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