

## **Healthy Nutrition and Healthy Life Curriculum in Turkey**

The Ministry of National Education (MoNE) in Turkey manages one of the largest educational systems in Europe with the continent's most centralized and selective system (Fretwell & Wheeler, 2001). MoNE not only regulates the teacher employment and relocation, but also imposes the curriculum, timetables, textbooks used in the classroom, and explicitly uses tests to have power over the teaching practices in the classroom. The non-political rationale that supports the current centralized and selective system is the massive size of the youthful citizenry in the country (Baki & Gokcek, 2005). In order to allocate the limited resources to the large student population on merit—rather than equality—the educational system relies on the success of centrally administered standardized and multiple-choice tests. Tests select the ablest out of masses for an education at elite upper secondary and higher education institutions (Turkish Education Association, 2008, 2010). The student selection process begins in grade 6 (MoNE, 2013) and starts to channel the ablest to specialized education at the upper secondary level.

In Turkey science teaching starts only at grade four and central guidelines or specific recommendations encourage schools to provide extra-curricular activities in science. The science lessons for grade 3 and 4 were designed 3 hours a week. The curriculum of Science and Technology from 3rd to 5th grades was designed by MoNE Board of Education with the frame of educational reform in 2013. The core/ main approach of the implementation of science education is based on structured inquiry for 3rd and 4th grades, guided inquiry for 5th& 6th grades and open-ended inquiry approach for 7th and 8th grades. The curriculum of Science and Technology for 6<sup>th</sup> is published in 2014. The rest of them will be redesigned and developed respectively by the MoNE Board of Education with the frame of educational reform. The Science and Technology Lesson from 5th to 8th grades are based on 7 learning domains (Living Organisms and Life, Matter and Change of Matter, Physical Changes, Earth and Space, Science-Technology-Society Environment Relations, Scientific Process Skills, Attitudes and Values.)

In order for the students to be able to achieve their goals of becoming Science literate, the learning themes chosen out of the Science Curricula were associated with 4 domains

Knowledge, Attitude & Skills, Affective Domains and Science-Technology-Society-Environment Domains. The purpose here is to focus on and study the fundamental concepts related to the content of the lesson as well as teach and practice the skills and knowledge gained within the various fields covered in this process such as Mathematics and Engineering. The interdisciplinary approach adopted and employed makes it possible, within the teaching process, for students to acquire some certain fundamentals and skills for some disciplines and then combine them in meaningful contexts effectively. (<http://ttkb.meb.gov.tr/www/guncellenen-ogretim-programlari/icerik/151>).

### **Healthy Nutrition and Healthy Life Curriculum in Science and Biology Lessons; 3-12 Grade**

<b>Grades</b>	<b>Themes &amp; Concepts</b>
3rd Grade	<ul style="list-style-type: none"> <li>*Healthy life</li> <li>*Health and sport</li> <li>*Balanced nutrition</li> <li>*Natural and healthy foods</li> </ul>
5th Grade	<ul style="list-style-type: none"> <li>*Requirement of nutritions and balanced nutritions;</li> <li>*Balanced nutritions's implications on human health.</li> <li>*Importance of freshness and naturalness of foods for healthy life.</li> <li>*Frozen foods, trussed foods, expire date, hygiene of foods awareness.</li> <li>*Anatomy/awareness of human body system</li> <li>* Alcohol's and smoke's effects on the Body</li> <li>*Science-Technology-Society-Environment relations</li> </ul>
7th Grade	<ul style="list-style-type: none"> <li>*Digestive and excretory system healthy</li> </ul>
9th Grade	<ul style="list-style-type: none"> <li>*Importance of biology</li> <li>*Famine, climate change, health issues and contributions of biology on this issues.</li> <li>*Importance of oil, carbohydrate, protein, vitamin, mineral for healthy life and nutrition.</li> <li>*Importance of regular and balanced nutrition and obesity, insulin resistance and diabetes relations.</li> </ul>
11 <sup>th</sup> Grade	<ul style="list-style-type: none"> <li>*Importance of sport and nutrition for body.</li> </ul>

### **3rd Grade Social Studies Lessons**

<b>Grades</b>	<b>Themes&amp; Concepts</b>
3rd Grade	<ul style="list-style-type: none"> <li>* Healthy life</li> <li>* Health and sport</li> <li>*Balanced nutrition</li> <li>*Natural and healthy</li> </ul>

	foods
9th grade	<ul style="list-style-type: none"> <li>*Importance of health</li> <li>*Physical activities and resting's contributions to health</li> <li>*Importance of adequate and balanced nutrition</li> <li>*Reasons of overweight and implications on health</li> <li>*Importance of individual hygiene for healthy life</li> <li>*Importance of cloth choosing for human health and sustainability of health.</li> </ul>

### Nutrition and Wellness Policies in Doga Schools

According to ‘Ottawa Charter for Health Promotion’, Health Promotion Action means; Build Healthy Public Policy, Create Supportive Environments, Strengthen Community Actions, Develop Personal Skills, Reorient Health Services, Moving into the Future. (Ottawa Charter for Health Promotion) Nutrition is a key factor for health. Children eat one of their daily meals at their schools. Curriculum provide an opportunity to teach about nutrition and healthy lifestyles. Culturel and economic differences influence the quality of school lunches. School lunches makes an essential contribution to student’s energy and nutritional level.

Doga Schools believe that the nutrition education can make a difference about students’ nutrition and food safety awareness. School nutrition policies are part of a whole school approach to health promotion policies with the involvement of teachers, principals and chefs. Doga Schools try to promote healthy lifestyle with taught curriculum, school culture, environment and families.

In most countries of the EU, the starting age for compulsory education is 5 or 6 years. In Turkey there are two type of education; half-day schooling and whole-day schooling. In half-day schooling ; all lessons given in one half of the day. Classes are held in the morning or afternoon. Doga Schools have whole-day schooling with a lunch break and try to provide healthy choices at lunch and cafeterias.

Generally lunch is eaten in cafeteria in many countries. In Doga Schools students have their lunch at school restourants. Doga Schools try to increase nutritional value of school lunches. Use conventionel ovens for protect nutrition levels. Sofra Group and ISS Group are catering companies and manage Doga Schools nutrition policies. Lunches follow a web-based programme setting by dieticians. This programme include a ‘**Plate Model**’ which called ‘Healthy Plate / Smart Plate /Colour of Health. Colour of Health Project developed My Plate

Concept in 2010. This concept was developed by Academy of Nutrition and Dietetics-USA Department of Agriculture. Doga Schools nutrition programme restrict the availability of foods high in salt, sugars and fat and promote nutrient-rich foods. At least one portion of fruit and one portion of vegetables are available per day. Also Sofra Group prepared a Healthy Nutrition Guidebook. This guidebook is approved by BESVAK -Nutrition Education and Research Foundation. This is a first nutrition guidebook for school children in Turkey. This guide aims to improve healthy nutrition, food safety and healthy lifestyle awareness.

Doga emphasize importance of collaboration with families. With menuboard implementation nutrition calories and nutrition suggestions are sharing with students and families. Parents are encouraged to involve school nutrition policies with web-based implementations. School offers dinner choices to parents according to lunch and engage families in nutrition policies.

Doga Schools organize nutrition trainings for students and chefs. Promote trainings about healthy for all staff especially chefs and cleaners. All staff are committed to school nutrition policies.

Effective nutrition education should be part of whole school approach. Besides lunch programmes, Doga Schools improve its school environment in terms of health and well nutrition habits. To encourage well nutrition; posters and leaflets are using. Doga Schools use posters for different age groups ,age 6-11 and 11-18, and different topics ( obesity and salt consume) Efective nutrition education should be part of classrooms, school environment and families. Also, health and nutrition interventions in school environment, sanitation and hygiene rules are important.

School lunch involve an opportunity to get healthy habits. There is a link between nutrition and better educational outcomes and concentration. Doga provide suitable environments that children can enjoy while eating. Doga try to provide to students enjoyment of foods with clubs. Doga Schools organize '**World-Wide Kitchen Days**' like Chinese and Spanish Days and make international workshops. Students also chance to attend Healthy Eating Student Clubs.

Also, chefs are attending the classrooms to promote healthy nutrition and food safety.

Children need to experience and observe what they learn about foods. Doga give chance to experiment and actively involved in healthy eating and cooking process with these activities and clubs. Students can experiment of harvesting and cooking with several activities like chef competitions. Every years '**Little Chefs Cook Competition**' is organized. The winner's recipe attached schools menu with winner's own name. Also a booklet with all participant's recipes will be printed.

Another programme is '**Eat-Learn-Live Programme-ELL**'. Cartoon characters represent different items as; Tiger means eat- Turtle means learn and Rabbit means live. Doga Schools improved story books with these characters. ELL Story Books aim to emphasize to students importance of healthy and balanced nutrition by using ELL Characters. At break times cartoons are broadcasting at smart boards to hidden awareness of well nutrition.

22 March '**Water and Health Day**' is celebrating every year with different events . Vital importance of water, washing and hygiene is emphasizing.

Lack of physical activity is the main reason of overweight. Doga schools try to promote physical activities with sports trainings, posters, leaflets and physical training and sports lessons. Doğa Schools is a successful educational institution in sports branches of Turkey along with its academic, cultural and artistic achievements. Doğa Schools, which endear sport even in pre-school period, lead the students to branch out starting at the 3rd grade. Our students who are active in every branch of sports from rowing to snowboard and badminton to horse-riding achieved many accomplishments in Turkey and worldwide.

Students of Doğa Schools maintain their artistic and physical developments with high level opportunities and in modern facilities besides academic education with sportive activities such as horse-riding, rowing, basketball, volleyball, swimming, judo, badminton, handball, step and gymnastics, football, mountaineering and climbing.

Our the most valuable principles in physical training and sports lessons are leading our students to performance sports in line with their skills and introducing life culture of branches of their interest. Successful and sportive students of Doğa Schools find their places in national teams, NBA and many different international platforms.

Doga schools have been implementing '**Kids Athletics Programme**' in physical training and sports lessons. This programme has developed by Naili Moran Athletics Education Foundation. As part of the Kids Athletics programme Doga Schools organizing feasts, competitions and tournaments. Students can learn and experience teaming up, achievement and defeat together with having fun in physical training and sports lessons.

Doga Schools curricula are generally dominated by nature and experiments, as Doga means Nature. Our '**Nature Based Learning Model**' which is the primary education model for Doğa Schools is the education model which is inspired by nature. With this education model which has influenced not only our country, but also the whole world, students learn everything by doing and experiencing from the most important teacher of all world; in other words, from the nature. Since the children have to grow up in modern city life racing against time and mostly removed from nature, we ensure the happiness of our students to have them develop physically, cognitively, and psychologically in a healthy way. For this purpose, we create environments that they can be free. Therefore, nature is an active component of our curriculum. In our Ecology Course which is one of the most important courses of our Nature Based Learning Model, we offer our students applied farming, and training in nature and environment. The major characteristic of these courses is that they are based on practice more than theory. Thanks to the Ecology Course, students get familiar with the natural life in a natural environment. They acquire lots of skills from making bread to growing tomatoes. With Ecology Course, we raise students who are sensitive to environment and respect natural life. Our Nature Based Learning Model gained international success as the first EU funded education system.

Ecology Courses that are applied in Doga Schools enhance the awareness of nature. Ecological production not only requires receiving the crop while working on the soil but also the richness of the soil takes us to other agricultural productions. On one hand students could be watering the fields and on the other hand they would be picking up the products to make a tomato paste, fruit jam or cut some noodles. Our students also learn to make yoghurt, buttermilk with the milk that they have milked from the cows and sheep which live in our barns. Doga students can eat and also take home their own made products while we usually consume already produced products from supermarkets in school.

**'Natural Learning Concept (NLC)**' has been developed and implemented in Doga schools for ten years and heavily emphasizes the learners' interests, creativity and self direction through creating a stimulating learning environment in which students can explore and come into direct contact with knowledge by using genial classrooms. NLC constitutes more creative and motivating teaching methods which are 'open-classroom' and 'Multiple Intelligence'.

One of the primary objectives of the project is to create and share good practices in teaching which will involve work on supporting the key competences of young learners in classroom applications among the participants in the partner countries. This encourages the best use of results, innovative products and processes and improves the quality of education and training through local workshops and online classroom implementations.

Teachers have equipped with materials and resources, lessons and educational activities which will arouse students' excitement and motivation through promoting the acquisition of key competences starting from the early school education.

Doga Schools organize '**Harvest Fest**' and '**Eco Fest**', '**Ecokids Panel**' to activate it's Ecology Courses. Also have projects as '**Breakfast time in Ecology Class**' , '**Feeding Station**' and '**National Sweater Day**' for this purpose. Also, Doga Beykoz Campus, situated on 55 hectares of Ahmet Mithat Efendi's Farm which has been in use for 150 years, transformed this beautiful environment of Beykoz into a valley of education in the 2002-2003 academic year. Being an inspiration to Natural Learning Concept as an education model, Beykoz Doga Campus offers an opportunity to our students to discover and develop their abilities in a natural atmosphere. From its horse riding facilities to zoo, from trekking courses to camping grounds, from swimming pools to wide cultivated areas, being completely in touch with nature, Beykoz Doga Campus shares the '**Live and Learn Model**' of Doga Campus with the other schools today.

Proving that education is not only given in the classes and learning by experience is also possible in limitless areas, Beykoz Doga Kindergarten enables the students to spend quality and enjoyable time out of school hours. From its horse riding facilities to zoo, from trekking courses to camp areas, from swimming pools to wide cultivated areas, being completely in touch with nature, Beykoz Doga Campus shares the Live and Learn Model of Doga Schools with the other schools today.

Doga students have chance to learn what food is nutritionally valuable, how to prepare good food, how to plant, how to cultivate and how to harvest . They have chance to learn all of them in big cities thanks to curricula and school environment. When students become parents, they will be aware of the right nutrition, hygiene, healthy life habits and rise their children with these awareness. Our nutrition education is vital importance for long term nutrition policies.

This project has been funded with support from the European Commission. This presentation (communication) reflects the views only of the author(s), and the National Agency and Commission cannot be held responsible for any use which may be made of the information contained therein.|