

# INTRODUCTION

Childhood obesity is a major medical and public health problem in the modern era. Overweight children have a 70% chance of becoming overweight adults and this is a harbinger of all the causes of morbidity associated with obesity during adulthood.

The number of overweight and obese children in Great Britain has doubled since the 1980s. The incidence of childhood obesity in Greece is among the highest in Europe. In 2004, a pan-European study showed that Greece has one of the highest incidences of high Body Mass Index (BMI) similar to the United States. A decade ago, a study by the University Pediatric Clinic of the National University of Athens on approximately 1500 children, aged 10-12 years in the region of Achaea, with an assessment of body composition, showed that 25.9% were overweight and 12.6% of the children were obese. A Greek study showed that 79% of children have moderate physical activity, 20% are involved in any type of sport, 50% of children watch television or play electronic games and computers, 4-7 hours a day and 28% 2-4 hours a day, 65% of children consume high-calorie foods such as fast food and sugary products and two out of three children have at least one overweight parent.

Obesity prevention is multifactorial, starting first with children, then with parents and family, school and teachers, and finally reaching the social fabric and state care. Nutrition and physical activity are complex behaviors that are intricately linked to the environment in which we live. While education and health education are important means of solving the problem, interventions need to be made at the community level to improve the children's environment.

This book is the first step in the prevention of childhood obesity, mainly aimed at children aged 5-7. It tries to familiarize them with two of the main causes of obesity, nutrition and physical activity, in an understandable way. The adoption, even of some of the practices described, by this sensitive child population will have positive effects on their later lives. This of course also requires obvious participation of the other factors that are part of the problem of childhood obesity.

I fully support this action and believe that it is a step in the right direction.

#### **Gabriel Dimitriou**

Professor of Pediatrics and Neonatology, University of Patras

Director of Pediatrics Clinic-ICU-ICU, Children's Hospital of Patras



# FOREWORD

Dear parents and children,

Childhood obesity is one of the most important Public Health problems in modern times, and especially in our country, which is in the first place. We have found that to date we have not managed to reverse it and we have identified the need for knowledge on the subject. In Greece, the country has the highest percentage of overweight and obese children in Europe, with most being between the ages of 5 and 7. Childhood obesity can have long-term health consequences, affecting adult life. According to the WHO, in 2022 there were 37 million obese children under 5 years of age worldwide. In Greece, childhood obesity has reached alarming levels, with risk factors including diet and lack of physical activity.

Parents, family members and teachers can play an important role in helping children understand the problem and contribute to their education.

The book is a sequel to the first book on Public Health, featuring the same characters (Alice and Socrates) and includes two main sections that play a role in childhood obesity, nutrition and exercise. The book tries to familiarize children with the problem of obesity in a friendly and cognitively easy way, helping them to understand the causes of the problem. At the same time, the book will try to educate parents and children together and give a start to discussions within the family about childhood obesity. The editorial team and I hope that you will enjoy the book and that it will become a valuable tool for our knowledge on childhood obesity issues.

Apostolos Vantarakis, Professor of Hygiene, Department of Medicine, University of Patras

# Editorial Team

- Vantarakis Apostolos
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- Magripli Emmanouela
   Assoc. Prof., Agricultural University of Athens
- Dr. Papachatzi Eleni Pediatrician, Neonatologist, University General Hospital of Patras

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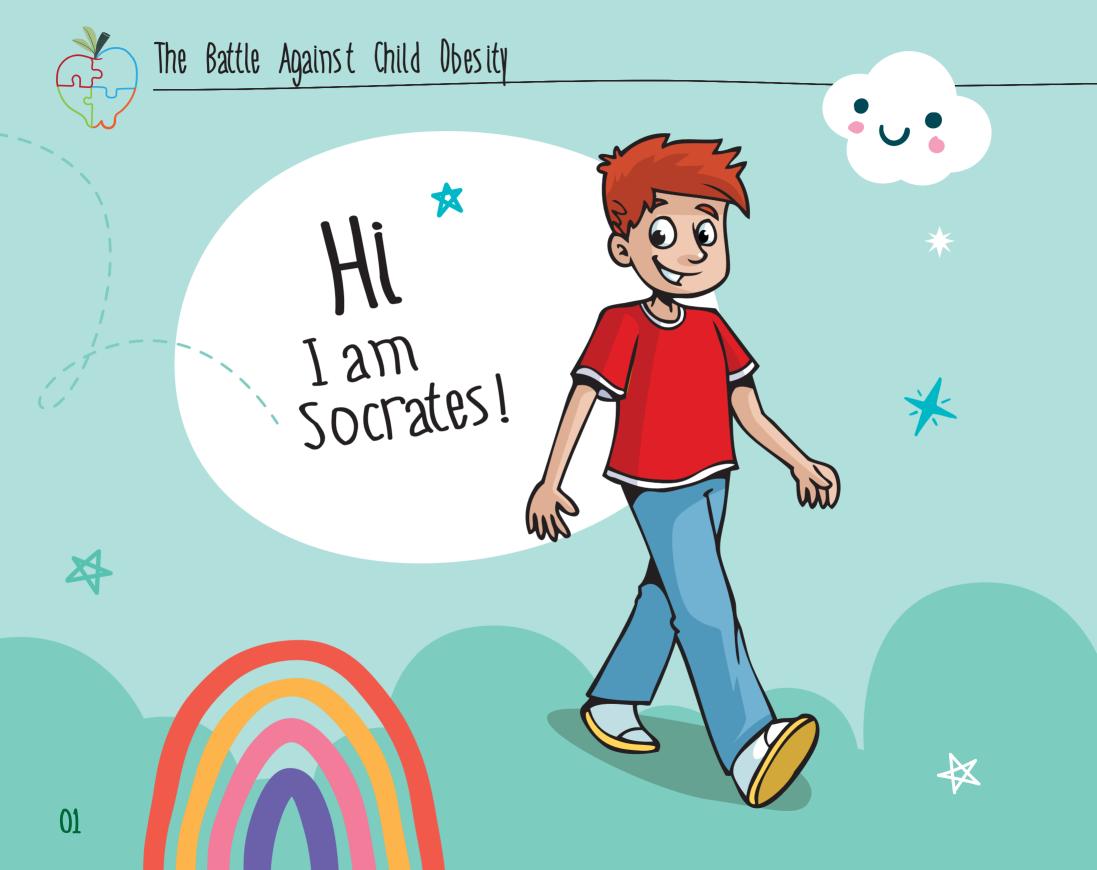
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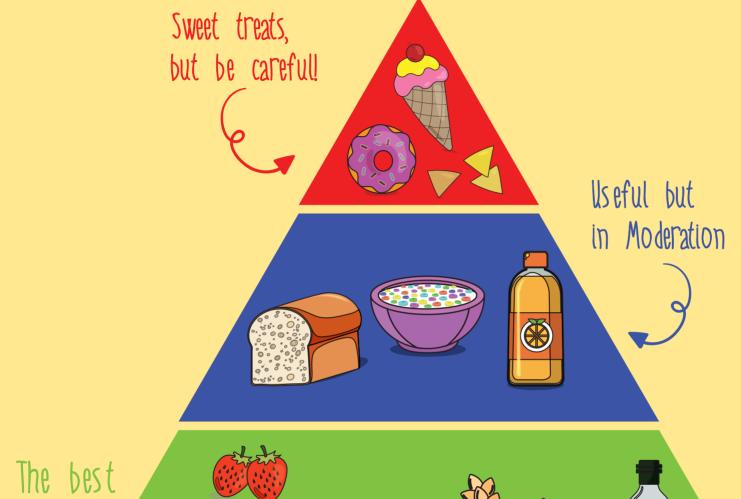












Some foods help our bodies grow strong, while other foods we can have sometimes.









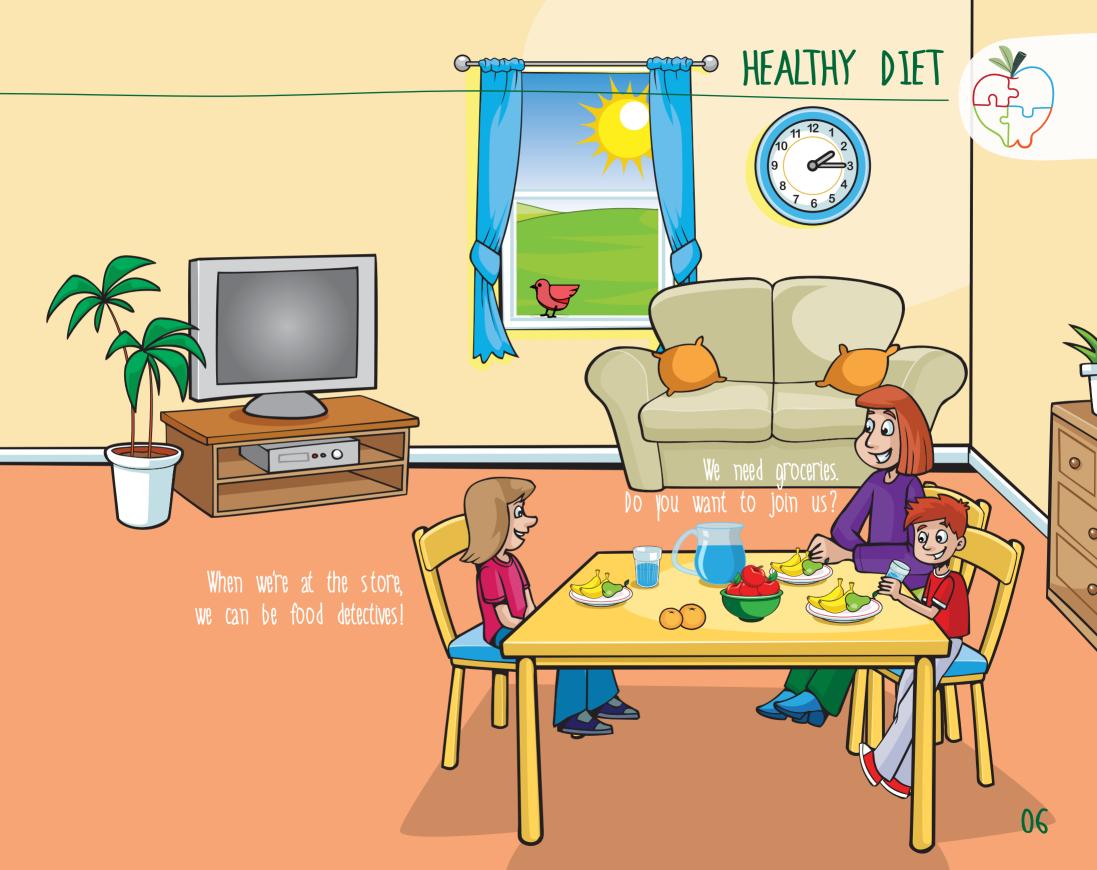


# HEALTHY DIET





Eating plenty of fruits, vegetables, whole grains, and olive oil help us grow strong and stay healthy. These are Mediterranean foods!





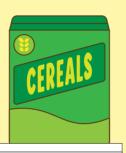


# HEALTHY DIET

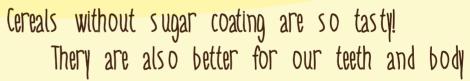














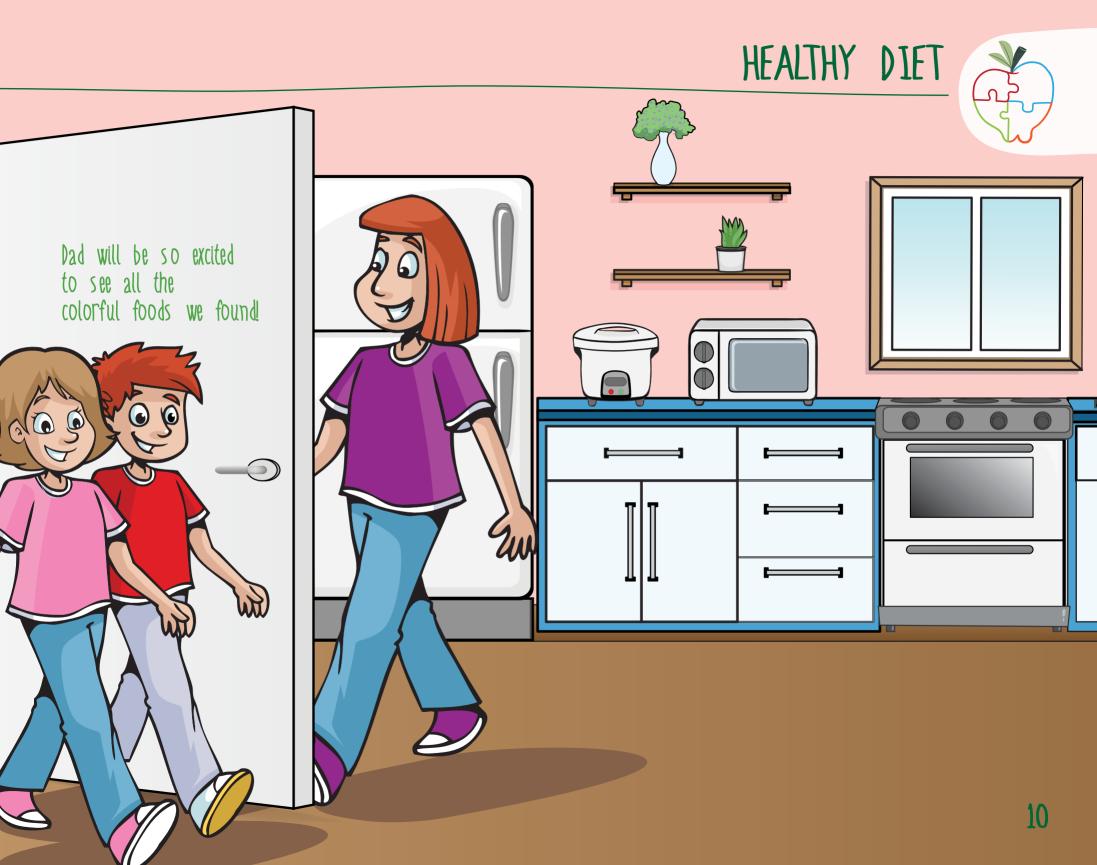


The whole orange, and we enjoy eating it longer!

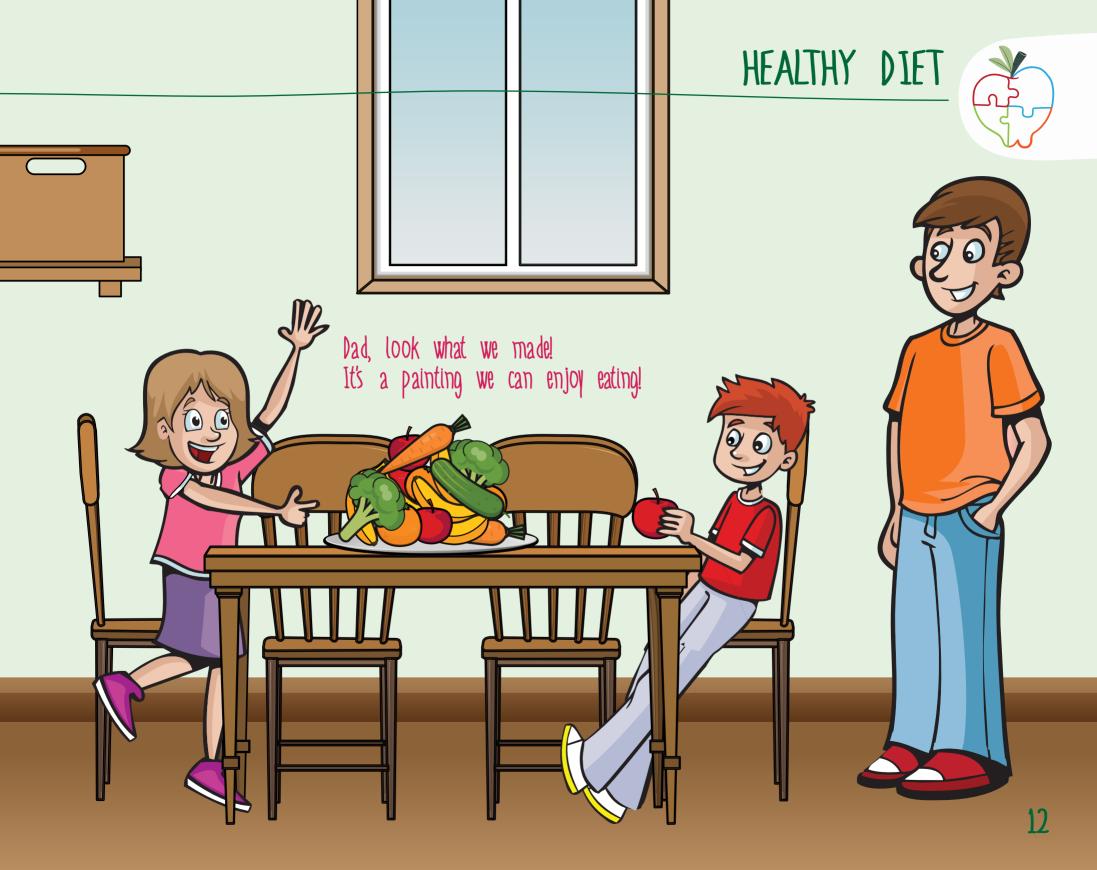


# SUPER MARKET











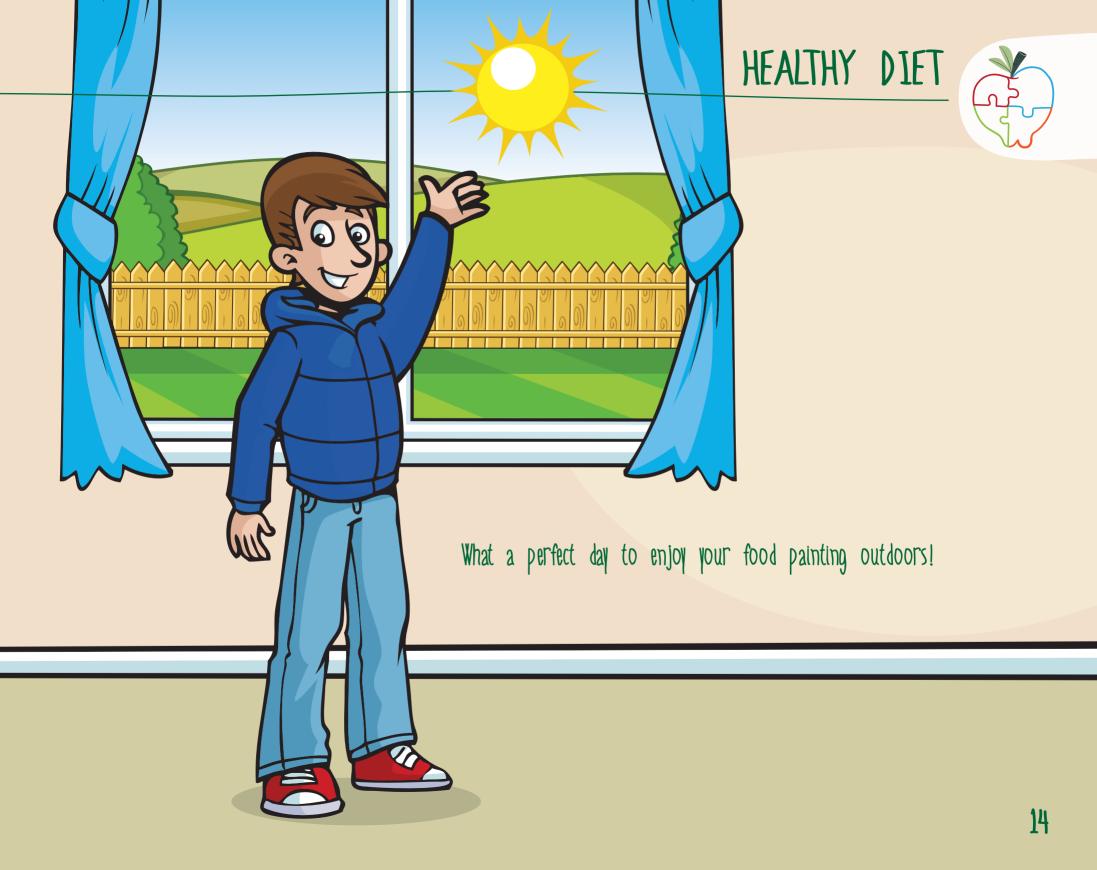
# EVERY COLOR GIVES YOUR BODY A DIFFERENT SUPERPOWER

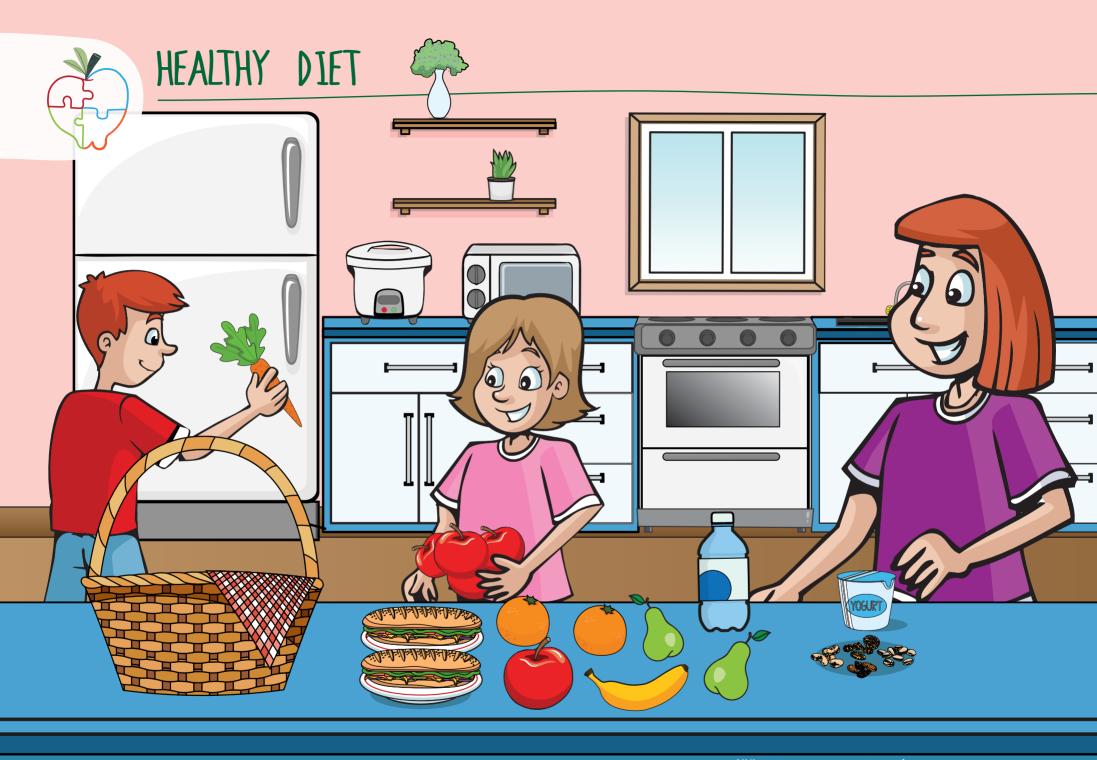




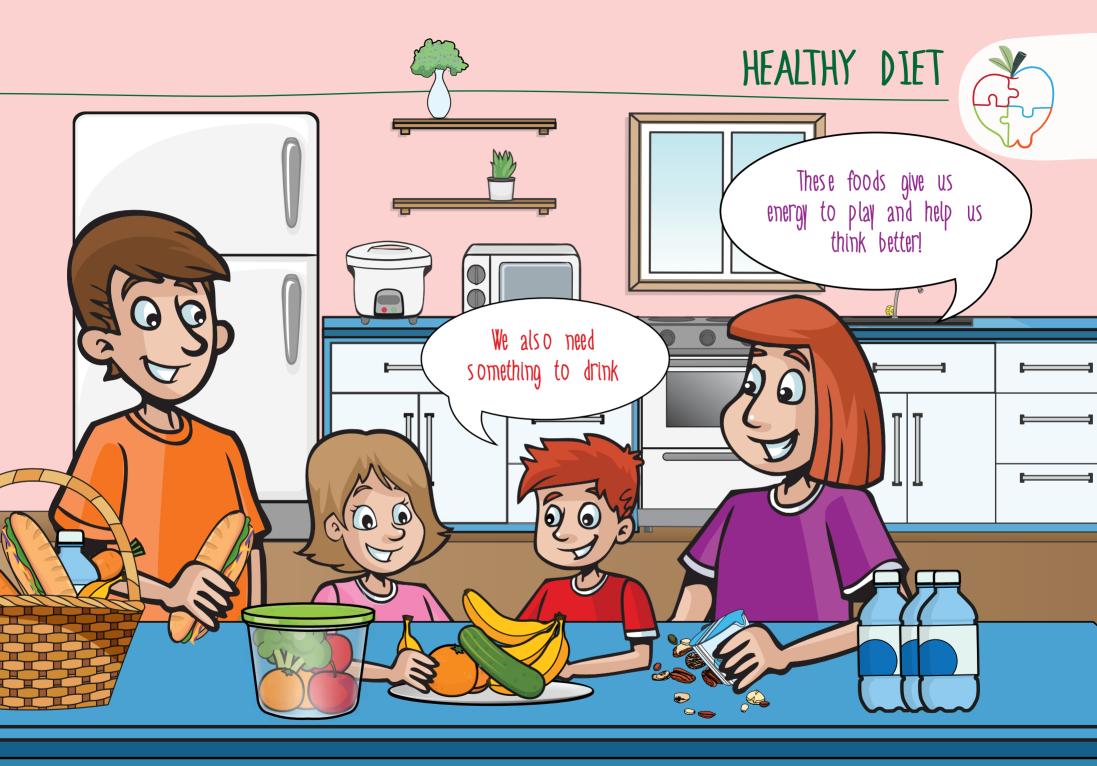
and green vegetables make your body stronger!

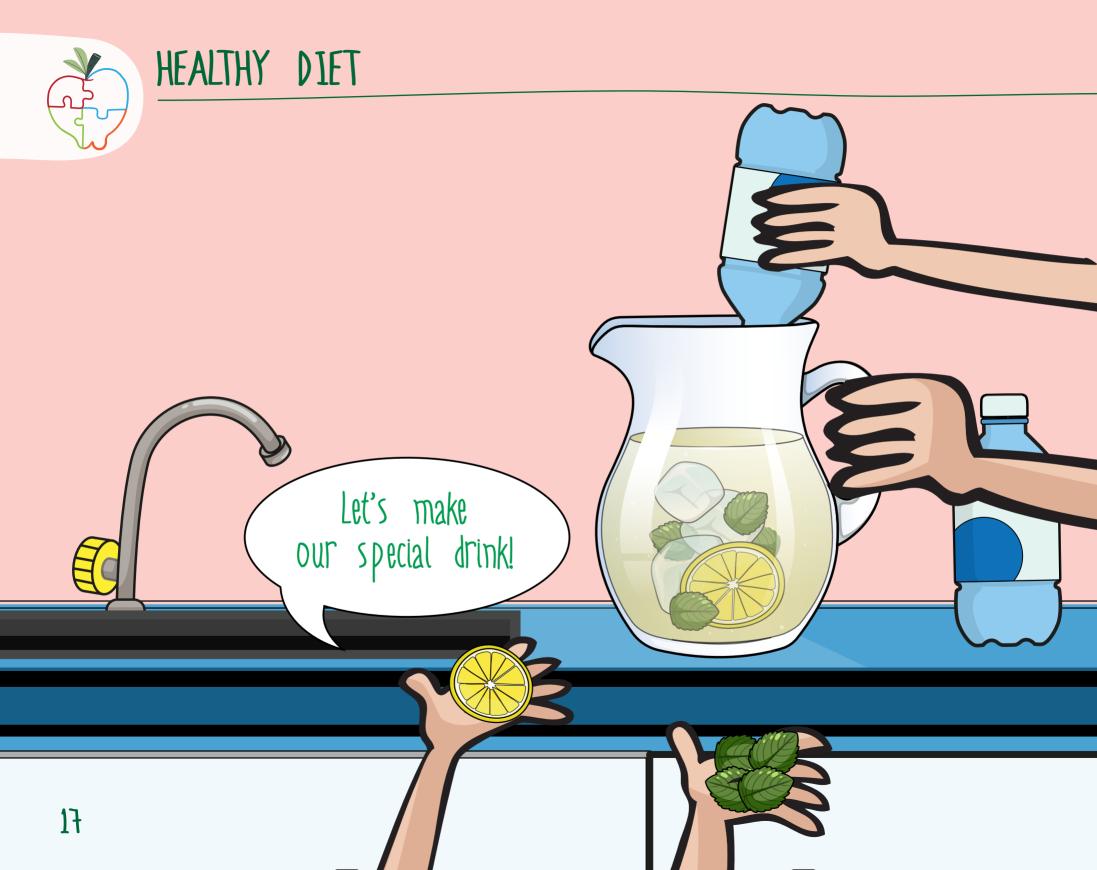






What a great ideal Let's pack some snacks and have a park picnic!





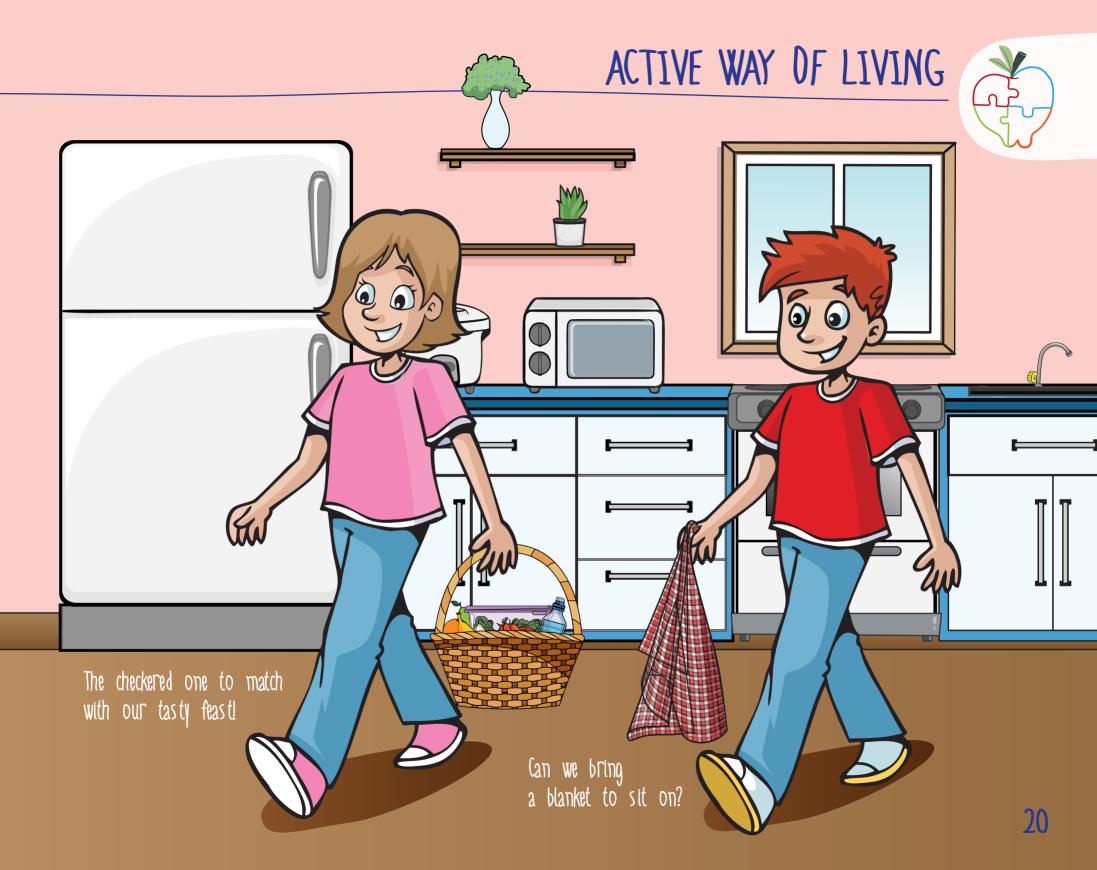


# ACTIVE WAY OF I I VIG





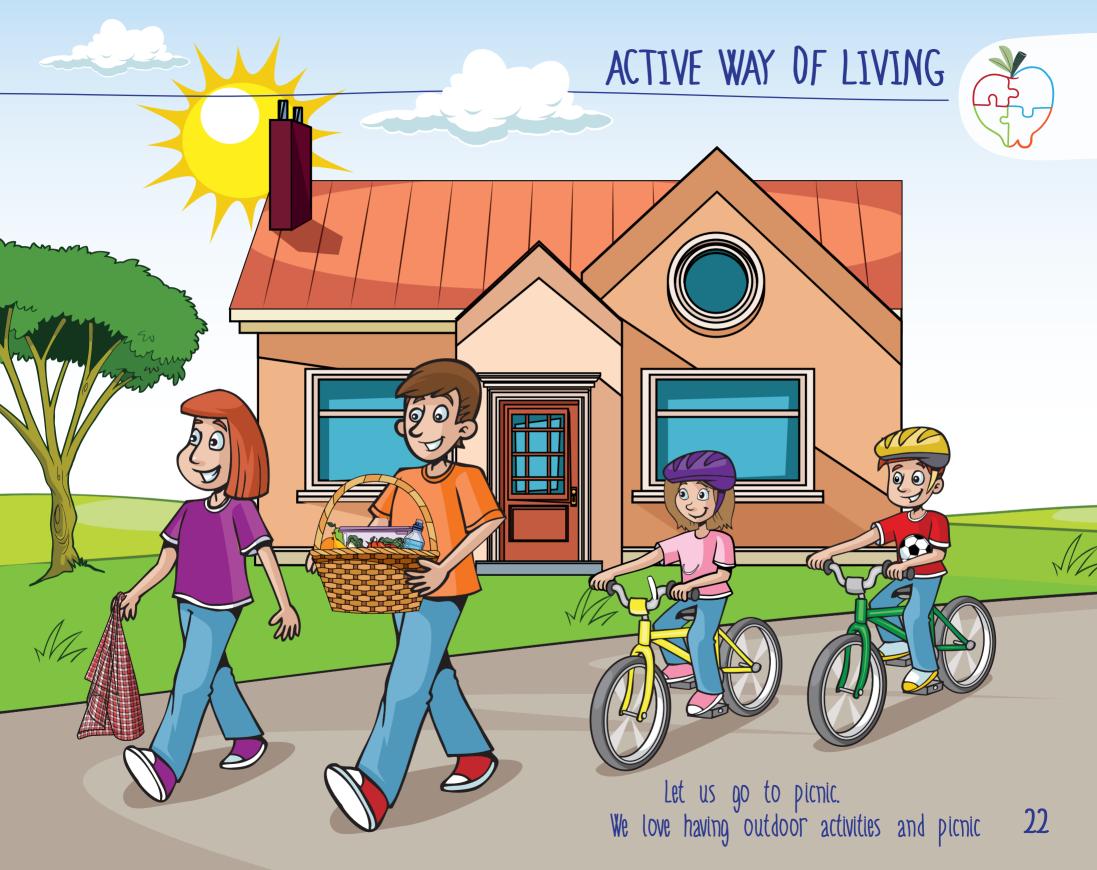




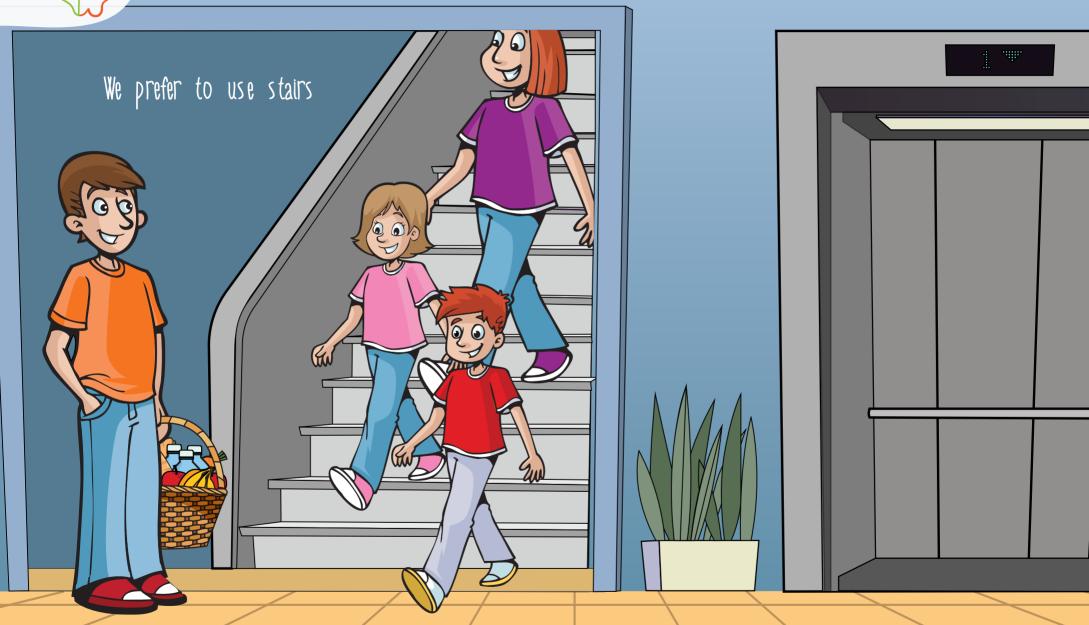


# ACTIVE WAY OF LIVING





# ACTIVE WAY OF LIVING



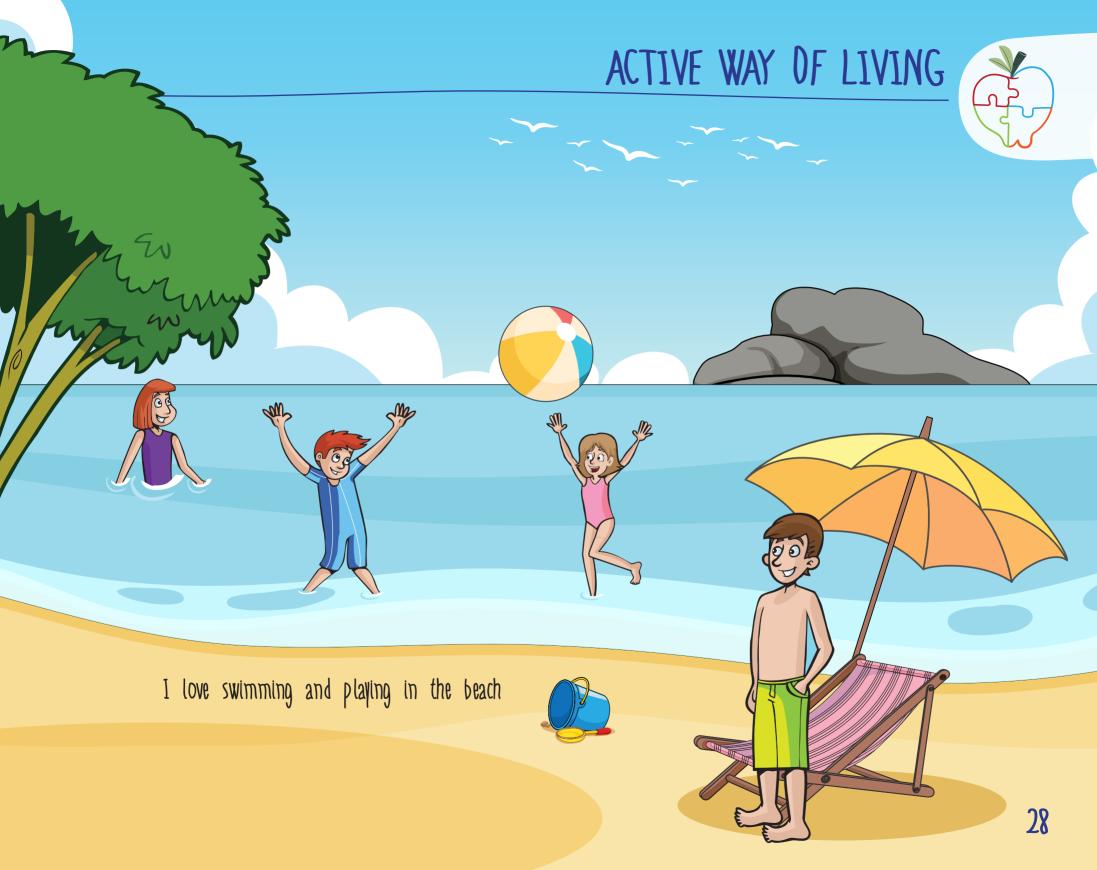
# ACTIVE WAY OF LIVING We love walking all together to the park



# ACTIVE WAY OF LIVING



# ACTIVE WAY OF LIVING I love playing with my dog





# ACTIVE WAY OF LIVING







### A few words for authors

#### **Coordinator-authorship**



## Vantarakis Apostolos, Professor of Hygiene, Department of Medicine, University of Patras

Born in Patras. He was an Assistant Professor at the Department of Medicine of the Democritus University of Thrace, Greece for 4 years (June 2004 - May 2008). He was a Technical Inspector at the Unified Food Control Agency, Ministry of Rural Development, Head of the Laboratory Controls & Measurements Department. He was a Technical Inspector at the Center for the Prevention of Occupational Risks/Labor Inspectorate of Western Greece. He received his B.A. in Biology from the University of Patras, Greece, his M.Sc. in Genetic Toxicology from the University College of Swansea, Wales, UK, and his PhD in Hygiene from the University of Patras. He has supervised over 30 European and 60 Greek research projects. He has supervised research work on issues of sensitive social groups (e.g. immigrants, Roma, etc.) on environmental impact issues. He has supervised 12 doctoral theses and over 50 diploma theses (at postgraduate level) and 40 diploma theses (at undergraduate level). He has published over 160 research papers in foreign language journals, has written and participated in over 5 books. He is a member of 10 scientific societies and Assistant Editor in 5 international journals. He is Director of the Public Health Postgraduate Program. He is Vice-President of the Social Welfare Committee, President of the Service Provision Committee of the University of Patras, member of the Bioethics Committee and member of the Health and Safety Coordinating Committee of the University of Patras. He was the Representative of the Medical Schools in the National Public Health Committee of the Ministry of Health. He is President of the Panhellenic Union of Bioscientists.



### A few words for authors

#### **Authorship**



#### Magriplis Emmanuela, Associate Professor, Agricultural University of Athens

She was born in Canada. She completed her basic studies in Clinical Nutrition at McGill University (Canada), her MSc in Epidemiology at the London School of Hygiene and Tropical Medicine (University of London) and her PhD in Greece (Agricultural University of Athens - AUA). She is an Associate Professor in Nutritional Epidemiology & Public Health, at AUA, and for the last 2 years she has been a Visiting Professor at the University of Patras (School of Medicine), Department of Hygiene. Her academic career includes active collaborations in Systematic Review Protocols with the University of Oxford (Centre for Statistics, CSM), and at the level of teaching and research with the Aristotle University (School of Medicine). She is the chair of the Epidemiology Working Group at the Hellenic Atherosclerosis Society, a member of the Scientific Committee of EFET and alternate vice-chair of the Research Ethics and Ethics Committee of the Greek Academy of Sciences. She participates in two European research programs focusing on the prevention of childhood obesity, the promotion of breastfeeding and the mapping of fermented food intake in 4 European regions for further shaping of nutritional policy. She also actively participates in more than 10 national research programs, supervises 4 PhD candidates and has supervised over 20 postgraduate students. She has published over 98 research papers in international journals, 5 books, 3 book chapters. She is also a reviewer in scientific journals and serves in editorial positions for many established nutrition journals (e.g. EJON).



### A few words for authors

#### **Authorship**



**Dr. Papachatzi Eleni,**Pediatrician - Neonatologist

She was born in Patras. She graduated from the Medical School of the University of Patras with a degree of Very Good. She followed Postgraduate Studies in Hygiene and Public Health, at the Hygiene Laboratory of the University of Patras with which she collaborates to this day. She holds a Master's Degree in Public Health with a specialization in Infectious Diseases (ESDY, Athens) and a Doctoral Degree from the Medical School of the University of Patras. She specialized at the University General Hospital of Patras (UGHP) and specialized at the hospitals University College London Hospital (UCLH) and St Mary's Hospital, Imperial College Healthcare NHS Trust in London (Paediatric Infectious Diseases).

She works as an Locum Consultant in the Neonatal Intensive Care Unit at the University General Hospital of Patras (UGHP). She has presented her research work at 35 conferences (national, European and international) while she has participated as a researcher in national multicenter epidemiological studies (EMENO, Hprolipsis).

She participates in teaching undergraduate and postgraduate students at the University of Patras in the field of Public Health (Health Promotion, Social and Preventive Medicine) as well as in voluntary actions related to Public Health (street action, actions for vulnerable social groups, population awareness, etc.).

