

SUMMER SCHOOL

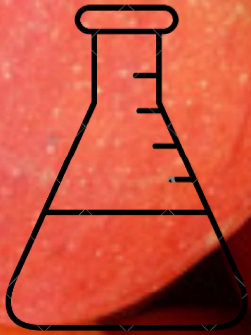
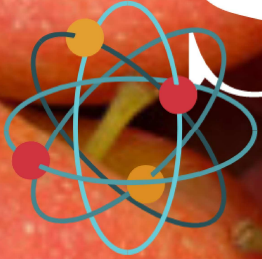
Polish-Italian Conference

MOLECULAR IMPACT OF WESTERN STYLE DIET

3rd edition

September 9 -13, 2019

Gdansk, Poland



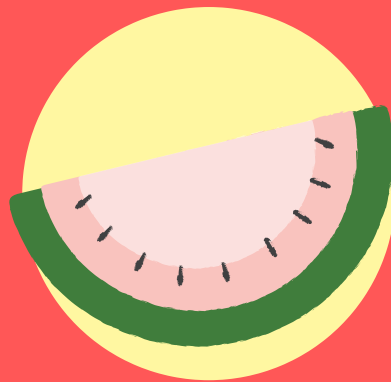
AZIENDA
OSPEDALIERA
SANTA MARIA
TERNI

THE BENEFITS OF FRUIT



PINEAPPLE

Rich in potassium, calcium, vitamin C, beta carotene, thiamin, B6, as well as soluble and insoluble fiber.



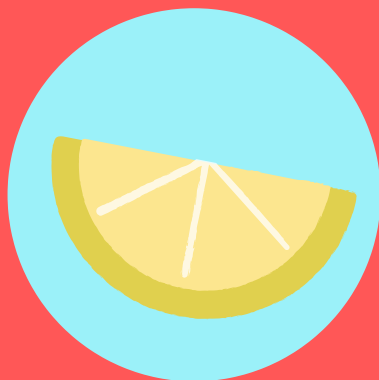
WATERMELON

Helps prevent kidney disorders, high blood pressure, the prevention of cancer, diabetes



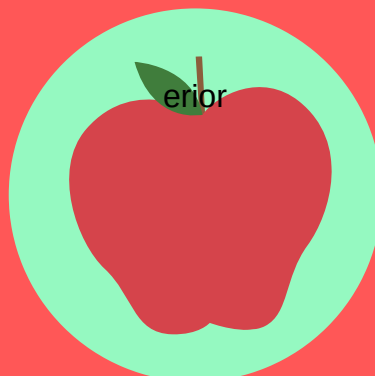
ORANGE

Boosts immune system function, reduce signs of aging, protect against cancer, and boost cellular repair.



LEMON

Has nourishing elements like vitamin C, vitamin B6, vitamin A, vitamin E, folate, niacin, thiamin, and riboflavin.



APPLE

Helps improve digestion, prevention of stomach disorders, gallstones, constipation, liver disorders.



KIWI

An excellent source of vitamin C, vitamin A, folate, vitamin E, and vitamin K. Has antioxidant properties.

Summer School 2019

Educational Project Outline

“The world is a book, and those who do not travel read only one page”
St. Augustine of Hippo (5th century)

Recent studies clearly suggest that obesity is not only a risk factor for diabetes mellitus, but also for malignancy. Diabetes mellitus itself has grown to be a major risk factor for endometrial, colorectal and breast cancer as well as hepatocellular carcinoma. It has become evident that diabetic tissues expressing insulin receptors and glucose transporters might exist in a proto-oncogenic state (*Trends in Molecular Medicine* 13, 2007, 252-259).

Both Mediterranean and Japanese diets are characterized by low consumption of butter and red meat, a high intake of antioxidant phenol-rich vegetables and fruits. The Mediterranean diet also includes olive-related derivative: olive oil, as well as red wine. Despite the above, obesity affects children in the Mediterranean region and Japan, and many other countries. Traditional Polish diet contains a lot of groats which is richer in fiber than Japanese rice, blueberries rich in polyphenols and red beet abundant in various antioxidants. Nevertheless, according to the National Mother and Child Institute estimation, as much as 31.2% of Polish children aged 8 suffer from overweight and obesity, while dangerous obesity affects as much as 12.7% of children.

An epidemic of childhood obesity is attributable to a number of factors like an increased intake of fast foods and sugar-dependent drinks (like soda) that are typical for the Western-style diet high in fat and carbohydrates but low in vitamins, minerals and other healthy micronutrients like polyphenols. Finally, another contributing factor having a negative impact on children's health arises from an increasingly sedentary lifestyle and widespread urbanization. A shortage of physical activity itself has some health consequences. Unfortunately, in the modern world, physical activity is being replaced with computer and video gaming among young children and teenagers.

Our past experience has proven that academic and public propaganda is insufficient, and so a tailored and specialized approach is necessary in order to help effectively manage obesity and obesity-related disease. Associazione Italiana di Dietetica e Nutrizione Clinica, Medical University of Gdansk and Nagoya University of Japan have agreed to share the experience on the academic level in the form of a cyclic Summer School creating an educational platform for young participants, and specifically school children and students in order to avoid nutritional problems leading to the global epidemic of obesity, metabolic syndrome, diabetes mellitus and cancer.

The Summer School will consist of lectures, seminars and practical exercises in cell culture rooms for young participants (school children, medical students and PhD students) from Italy, Poland and Japan. Classes will be conducted by Italian, Polish and Japanese lecturers and instructors. Medical University of Gdansk will provide free accommodation for the second week of September, 2019.

Last year we had a pleasure to participate in a beautifully organized 2nd Edition of The Summer School in Terni 2018. This year, for the 3rd Edition of The Summer School we are inviting school children from Italy and Poland with the intention to create a European Medical College as a platform for preacademic education and prevention against lifestyle and civilization diseases.

Committees and Contacts

Chairmen

Giuseppe Fatati, President of ADI Foundation (Italy)
Michał Woźniak, Medical University of Gdansk (Poland)
Enrico Bertoli, Scientific Coordinator ADI Foundation (Italy)

Scientific Committee

Michał Woźniak, Medical University of Gdansk (Poland)
Giuseppe Fatati, President of ADI Foundation (Italy)
Enrico Bertoli, Scientific Coordinator ADI Foundation (Italy)
Lucedio Greci, University of Ancona (Italy)
Ryszard T. Smoleński, Medical University of Gdansk (Poland)
Jędrzej Antosiewicz, Medical University of Gdansk (Poland)
Iwona Inkielewicz-Stepniak, Medical University of Gdansk (Poland)
Michał Żmijewski, Medical University of Gdansk (Poland)
Magdalena Górską-Ponikowska, Medical University of Gdansk (Poland)
Alicja Kuban-Jankowska, Medical University of Gdansk (Poland)
Narcyz Knap, Medical University of Gdansk (Poland)
Karolina Niska, Medical University of Gdansk (Poland)

Organizing Committee

Michał Woźniak, Medical University of Gdansk (Poland)
Ryszard T. Smoleński, Medical University of Gdansk (Poland)
Sławomir Stefan Czarnecki, Pomeranian Medical College
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Szymon Kowalski, Medical University of Gdansk (Poland)
Karol Steckiewicz, Medical University of Gdansk (Poland)
Adam Figarski, Medical University of Gdansk (Poland)

Honorary Committee

Marcin Gruchała, President of the Medical University of Gdansk (Poland)
Tomasz Bączek, Vice President of the Medical University of Gdansk (Poland)
Tomasz Smiatacz, Vice President of the Medical University of Gdansk (Poland)
Maria Dudziak, Dean of the Medical Faculty, Medical University of Gdansk (Poland)
Lech Wałęsa, Former President of Poland
Mieczysław Struk, Marshal of the Pomeranian Voivodship (Poland)
Bogdan Łapa, Governor of the Kartuzy District, Pomerania (Poland)

Contact

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Program Overview

Monday, Sept. 9, 2019

Arrival and accommodation of participants

19:30 Welcome Reception Dinner (*La Cantina* Restaurant)

Tuesday, Sept. 10, 2019

10:00 – 10:30 Conference registration

10:30 – 10:50 Coffee break

11:00 – 13:30 Practical workshop (Cell tissue culture rooms)

14:00 – 15:30 Healthy Lunch Seminar (*La Cantina* Restaurant)

15:30 – 16:15 Opening Ceremony (Welcome by MUG Authorities)
Key note speech (Giuseppe Fatati, Michał Woźniak)

16:30 – 17:30 Session I (Lecture Hall C, Collegium Biomedicum)

17:30 – 18:00 Coffee break

18:00 – 19:30 Session II (Lecture Hall C, Collegium Biomedicum)

20:00 Gala Dinner (*La Cantina* Restaurant)

Wednesday, Sept. 11, 2019

10:00 – 13:00 Practical workshop (Cell tissue culture rooms)

13:00 – 14:00 Session III (Lecture Hall A, Collegium Biomedicum)

14:00 – 15:00 Healthy Lunch Seminar (*La Cantina* Restaurant)

15:00 – 16:30 Session IV (Lecture Hall A, Collegium Biomedicum)

16:30 – 17:00 Coffee break

17:00 – 19:30 Session V (Lecture Hall A, Collegium Biomedicum)

20:00 Dinner (*La Cantina* Restaurant)

Thursday, Sept. 12, 2019

10:00 – 13:00 Practical workshop (Cell tissue culture rooms)

13:00 – 14:00 Healthy Lunch Seminar (*La Cantina* Restaurant)

14:00 – 15:00 Computer session summary

19:00 Dinner (*La Cantina* Restaurant)

Friday, Sept. 13, 2019

10:00 – 11:30 Session VI (Seminar Room #210, floor II, Collegium Biomedicum)

11:30 – 12:00 Coffee break

13:00 – 14:00 Healthy Lunch Seminar (*La Cantina* Restaurant)

16:00 – 17:00 Nordic walking (Gdansk ZOO)

17:00 – 17:30 Award Ceremony (Gdansk ZOO)

17:30 – 20:00 Farewell Dinner at Gdansk ZOO

Scientific Program

Tuesday, Sept. 10, 2019

11:00 – 13:30 Practical workshop

Acrylamide as a selective neurotoxin from chips & French fries

(In memoriam of the late Dr. Irena Popinigis)

- Introduction to the cell culture techniques (demonstration of tissue culture lab work)
- Cell incubation (mouse hippocampal neuronal cell line HT-22 treated with **acrylamide** which is well documented to be present in potato *chips* and fries)

16:30 – 17:30 Session I (Lecture Hall C, Collegium Biomedicum)

Moderators: Michał Woźniak, Lucedio Greci

- **Food in the Art: Mediterranean Diet versus Veg Diet**
Enrico Bertoli
- **Obesity and Diabetes: from urban health to urban diseases**
Giuseppe Fatati

18:00 – 19:30 Session II (Lecture Hall C, Collegium Biomedicum)

Moderators: Giuseppe Fatati, Michał Woźniak

- **Mediterranean Diet, physical activity, longevity and telomere length**
Elisabetta Manfredi
- **Potential antidiabetic roles of polyphenolic compounds**
Tiziana Bacchetti
- **From Food labels to human diet. Role of carbohydrates**
High School Students

Wednesday, Sept. 11, 2019

10:00 – 13:00 Practical workshop

Anticancer weapons: a zinc hammer and green tea shield

- Analysis of the results of HT-22 treatment with acrylamide (trypan blue dye, MTT assay)
- Cell incubation of osteosarcoma 143B and pancreatic MIA PaCa2 cancer cell lines treated with **zinc and 15-deoxy prostaglandin J2 as well as epigallocatechin gallate extracted from green tea**

13:00-14:00 Session III (Lecture Hall A, Collegium Biomedicum)

Moderators: Giuseppe Fatati, Jędrzej Antosiewicz

- **Food properties: From Glycemic Index to Dietary Insulin Index**
Gianna Ferretti
- **Inflammatory effect of plastic nanoparticles from food packages**
Iwona Inkielewicz-Stępnik, Karolina Niska, Karol Steckiewicz
- **The Mediterranean Diet**
Antonio Caretto

15:00-16:30 Session IV (Lecture Hall A, Collegium Biomedicum)

Moderators: Giuseppe Fatati, Enrico Bertoli

- **The role of antioxidants in food**
Lucedio Greci
- **Fructose as a toxic sugar**
Jędrzej Antosiewicz
- **Vitamin D3 in prevention and treatment of preeclampsia**
Michał Żmijewski, Narcyz Knap, Piotr Zabul

17:00-18:30 Session V (The Professor Jerzy Popinigis Salellite Symposium)

Moderators: Enrico Bertoli, Michał Woźniak

- **Hepatic function indices in an Umbrian cohort after Sleeve Gastrectomy**
Luisa Barana
- **Compounds extracted from Red Sea marine organisms as potential PTP1B phosphatase inhibitor**
Tomasz Kostrzewa
- **Glyco-oxidative stress. Role of the antioxidant and anti-apoptotic enzyme paraoxonase 2**

Camilla Morresi

- **2-methoxyestradiol - a missing link between cancer cell death and neurodegeneration development?**
Paulina Przychodzień
 - **Low FODMAPs diet improves functional gastrointestinal symptoms in patients with Crohn disease. A randomized controlled cross-over trial of well defined diets**
Irene Del Ciondolo
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Thursday, Sept. 12, 2019

10:00 – 13:00 Practical workshop

Nutraceuticals from olive oil, green tea and veggies

- Analysis of the results of 143B and MIA PaCa2 treatment with zinc and 15-deoxy prostaglandin J2 as well as epigallocatechin gallate extracted from green tea (trypan blue dye, LDH assay)
 - DPPH assay measuring the reducing ability of antioxidants): **epigallocatechin gallate, vitamin C, vitamin E, olive leaf extract (*oleuropein, tyrosol, hydroxytyrosol*) and ferulic acid**. *Tasting different types of olive oil focusing on the all important bitterness characteristic.*
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Friday, Sept. 13, 2019

10:00 – 11:30 Session VI (The Professor Jerzy Popinigis Salellite Symposium)

Moderators: Giuseppe Fatati, Michał Woźniak

- **Very low-carbohydrate ketogenic diet before bariatric surgery**
Maria Adele Bufo
- **Effect of silver nanoparticles on aggregation of human blood platelets**
Justyna Hajtuch
- **Ketogenic diet and educational therapy in type 2 diabetic patients in poor metabolic control: proposal for intervention during therapy upgrade**
Fabio Mangalaviti



SUMMER SCHOOL 2019

HEALTHY EATING HABITS

A BALANCED PLATE

FRUITS & VEGETABLES

DAIRY & GRAINS

PROTEIN & HEALTHY FAT

COMPLEX CARBOHYDRATES

ANTIOXIDANTS

MICROELEMENTS





Pomorski College
Medyczny

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IO • net 
italian obesity network



FONDAZIONE ADI



ADI Associazione Italiana
di Dietetica e Nutrizione Clinica