



Food Oral Processing Laboratory

Newsletter 2

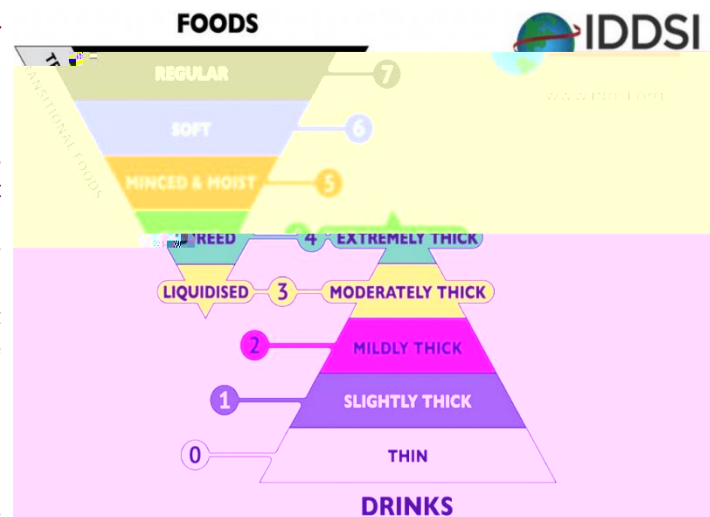
April 2016



OUR MISSION

The Food Oral Processing Research Laboratory at ZGU will apply integrated experimental approaches to study eating and sensory perception. The main objectives are to improve our fundamental understanding on the principles and mechanisms underpinning eating and sensory perception and to solve eating- and sensory-related problems of immediate concerns to consumers, industries and governments. We aim to make healthy food tastier and tasty food healthier.

Prof. Jianshe Chen has participated in a global effort in diet standardisation for dysphagia patients. The effort is coordinated by the **International Dysphagia Diet Standardisation Initiative (IDDSI)**, an independent, not-for-profit global entity, established in 2013 by a group of experts of clinical, caring, rehabilitation, as well as food background, coming from many different countries. Three years of ongoing work by the IDDSI has culminated in a final dysphagia diet framework. This framework sets globally acceptable terminology and definitions for the description of texture modified foods and thickened liquids used for individuals with dysphagia of all ages, in all care settings, and all cultures. The framework consists of a continuum of 8 levels (0-7), identified by numbers, text labels, as well as color codes (see inserted graph). After the publication of the framework, the IDDSI is now moving to stage two plan - the roll out and adaptation of IDDSI framework in target countries. A MAPA (Monitor Aware Prepare Adopt) roll out strategy has been developed. The implementation of the framework will bring great benefits to food industries and care industries in ensuring the quality of dysphagia diet and improving well-being of dysphagia patients. More information about IDDSI, the framework, and roll out plan can be found at www.iddsi.org.



DR. CHRISTOS RITZOULIS was educated in Thessaloniki, Greece (BSc in Chemistry) and in Leeds, UK (MSc in Food Science, PhD in Food Science). He has worked for four years in the Hellenic States General Chemical Laboratories, and since 2008 he works at the Department of Food Technology, ATEI of Thessaloniki, Greece, where he is now an Associate Professor/Reader of Food Chemistry. He is member of the editorial board of two international journals, while he has published over 40 scientific publications, five book chapters, and a book on the physical chemistry of foods. Christos will be visiting Zhejiang Gongshang University for the next five years as a Distinguished Expert.



FOP STAFF

DR. XINMIAO WANG has recently joined Food Oral Processing research group as a lecturer. Xinmiao got her bachelor degree in Food Science and Engineering from Harbin Institute of Technology (HIT) and Ph.D. in Agricultural and Biological Engineering from Pennsylvania State University (USA) in May, 2015. More of a food addict, Xinmiao has always been interested in food, not just the taste and joy it brings, but the nutrition and sensation behind. As a Sagittarius (not unexpectedly), Xinmiao loves to take new adventure and to make new friends all over the world, of course, with the accompany of delicious food. She is an outgoing person and enjoys all kinds of hobbies (not to professional level at any though), Xinmiao claimed. If you want to visit our food oral processing lab, Xinmiao will be very pleased to have a chat with you and show you around the lab. (Contact: xmwang@zjgsu.edu.cn) .



INVITED TALKS GIVEN BY PROF. CHEN

- September 24-25 2015, Elderly care conference, Shanghai, "Texture modification and texture standardization of food for elderly"
- October 15-17, 2015, Food for Elderly International conference, Hangzhou, "Texture modification and characterization of food for elderly" 2015,
- October 28-31, Food Structure, Digestion, and Health international conference, Wellington, New Zealand, "Food oral destruction: mechanisms and implications"
- November 12, 2015, NIZO, the Netherlands, "Food-saliva interactions"
- March 26-27, 2015, Workshop for health cares, Guangzhou, "International standardization of texture modified food for elderly."
- **PhD examination:**
- November 13, 2015, Wageningen University, the Netherlands
- March, 2016, Massey University, New Zealand

FOP ACTIVITIES AND RESEARCH

and Food Technology

Institute of Agro-chemistry

in vitro

Food and Function



GRANT INFORMATION: Grants and scholarships are available for the postdoctoral researchers and PhD students. For details, please contact us.

FUN TIME



JOINT RESEARCH LABORATORY WITH THE UNIVERSITY OF LEEDS,

from both sides to deal with scientific problems of eating and sensory perception. The laboratory was jointly revealed on the 28th of March by Prof. Su Weihua, the vice president of ZJGU, and Prof. Mike Morgan, the Head of the School of Food Science and Nutrition, University of Leeds.

The laboratory will be funded by and based at ZJGU. A management team headed by Prof. Jianshe Chen consists of staff from both universities to oversee the directions and strategy of the laboratory. One post-doctoral research fellow will be appointed shortly to the joint laboratory. Joint PhD training programs are also planned for coming years.

GRANT AWARD

A grant has been awarded



DR. CAROL MOSCA is currently working in a collaboration project between Zhejiang Gongshang University and Wageningen University, in the Netherlands. The investigation of the project focuses on the physiological factors that influence the eating behavior of Asian and European consumers and implications to sensory perception and food preference. One aspect is to compare the saliva composition between the different ethnic groups (or groups following different dietary patterns).

RECENT PUBLICATIONS

- Laguna, L., Mingioni, M., Maitre, I., Van Wymelbeke, V., Pirttijarvi, T., Artigas, M. G., Izabella, G.-K., Chen, J. & Sarkar, A. (2016). Perception of difficulties encountered in eating process from European elderlies' perspective. *Journal of Texture Studies*, accepted.
- Laguna, L., Ettelaie, R., Holmes, M. & Chen, J. (2016). A comparison between young and elderly adults investigating the manual and oral capabilities during the eating process. *Journal of Texture Studies*, accepted.
- Ettelaie, R.*, Holmes, M., Chen, J. & Farshchi, A. (2016). Steric stabilising properties of hydrophobically modified starch: amylose vs amylopectin. *Food Hydrocolloids*, **58**, 364-377.
- Mosca, A.C.* & Chen, J. (2016). Food oral management: physiology and objective measurements. *Current Opinion in Food Science*, accepted.
- Upadhyay, R., Brossard, N. & Chen, J.* (2016). Mechanisms underlying astringency: an tribology approach. *Journal of Physics D*. **49**, 104003, (11pp).
- Brossard, N., Cai, H., Osorio, F., Bordeu, E. & Chen, J.* (2016). Oral tribological study on the astringency sensation of red wines. *Journal of Texture Studies*, accepted.
- Laguna, L., Aktar, T., Ettelaie, R., Holmes, M. & Chen, J.* (2016). Physiological capabilities of eating and effects of ageing. *Physiology and Behaviour*, accepted.
- Chen, L., Chen, J., Yu, L. & Wu, K. (2016). Improved emulsifying capabilities of hydrolysates of soy protein isolate pretreated with high pressure microfluidization. *Food Research International*, **69**, 1-8.
- Laguna, L. and Chen, J.* (2016) The eating capability: constituents and assessments. *Food Quality and Preference*, **48**, 345-358.
- Laguna, L., Sarker, A. & Chen, J. (2015). Assessment of eating capability of elderly subjects in UK: a quantitative evaluation. *Proceedings of the Nutrition Society*, **74**, E167.
- Laguna, L., Sarkar, A., Artigas, G. & Chen, J. * (2015). A quantitative assessment of the eating capability in the elderly individuals. *Physiology and Behaviour*, **147**, 274-281.

2015

. 36. 310-315.

FOP Lab organized a **MATLAB WORKSHOP** for the lab members with Ms. Solange Sanahuja and Dr. Rutuja Upadhyay December 3-16 2015.

CONTACT DETAILS: PROF. JIANSHE CHEN email: jschen@zjgsu.edu.cn; j.chen@food.leeds.ac.uk Tel: (00)86 571 28008904 Fax: (00)86 571 28008900 Web: www.spxy.zjgsu.edu.cn **ADDRESS:** Lab No. 337, Food Oral Processing Laboratory, School of Food Science and Biotechnology, No. 18 Xuezheng Street, Zhejiang Gongshang University, Hangzhou 310018, CHINA.

EDITOR: Dr. Rutuja Upadhyay, Email: rutuja.upadhyay54@yahoo.com