



## SYMPOSIUM/WORKSHOPS/Breakfasts PROPOSAL TEMPLATE

17th International Congress of Dietitians  
**GRANADA  
SPAIN  
2016**  
7, 8, 9 and 10 September

### **General information**

- **Symposiums** can take up to two hours and will offer a strong scientific focus and approach. They
- **Workshops** can take up to two hours and will have a practical, professional and hands on structure. Will be held simultaneously to other workshops. Registration will be needed. Limited places 70-120 attendees.
- **Breakfasts** can take up to one hour and will have an informal set up where all Associations' members - both directors and associates - can discuss a specific scientific or professional subject in an enjoyable and colloquial environment.

Food industry and/or a pharmaceutical company can sponsor the Symposium /Workshop/ Breakfast. Sponsor 's details will be provided as part of the proposal.

#### **SYMPOSIUM Title/Theme:**

Please insert the title/theme of your symposium. Titles will be used in all pre-Congress promotion. Titles must accurately describe the content of your session and be no more than 10-12 words long.

Water, hydration and fluid for sustainable health: what do we know?

#### **SYMPOSIUM Facilitators: Names and main filiation**

Anne de Looy; Hon President European Federation of the Association of Dietitians

#### **SYMPOSIUM Presenters: Names and main filiation**

Joan Gandy, PhD RD FBDA – independent dietitian UK  
Isabelle Guelinckx, RD MSc PhD – Scientific officer Danone Nutricia Research,  
Olle Melander, MD PhD - Professor of Internal Medicine at Lund University and consultant at the Department of Internal Medicine, Skåne University Hospital, Malmö, Sweden  
Pauline Douglas BSc RD FBDA – Senior Lecturer Dietetics; University Ulster, Colrairie N Ireland

#### **SYMPOSIUM History:**

Has the symposium/workshop been held previously? If yes, please describe previous symposium details and rationale for repeating session.

A similar session, but not identical, was held at the 9<sup>th</sup> EFAD Conference (2015). The session was highly rated for its up-to-date scientific content and importance for dietitians. Hydration is seen as a neglected subject for long-term health implications and under investigated topic.



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### **SYMPOSIUM Overview:**

*Insert a short **overview** of your symposium/workshop proposal. If accepted, this information will be used in publications to promote your session. Overview should not exceed 100 words.*

Water is essential to health, and is one of the six basic nutrients but can be overlooked. A fundamental problem is identifying the extent to which an individual or population is hydrated and the requirement/recommendations for water. New evidence is emerging about the long-term consequences of poor hydration and its link with diabetes and cardio-metabolic risk. However emerging methodologies for assessing fluid intake, markers of hydration and indicators for sustainable health are to be discussed and evaluated. Finally how dietitians are responding to this evidence and recommendations for enhancing their role in further research and education will be presented.

### **SYMPOSIUM Proposal: All details**

In English, with a limit of 800 words: you must include a minimum of 3 references and a maximum of 10 references (will follow the consecutive order in which they appear in the text with the corresponding consecutive numbering in Arabic numerals in parentheses; Vancouver style).

### **Symposium Proposal**

Water is essential to health, and is one of the six basic nutrients but is often overlooked. Mild dehydration can have negative health effects such as impaired physical function, the potential for long-term consequences on health and cognitive decline<sup>1</sup>. By not recognising dehydration vulnerable individuals miss out on the support they need to help maintain a healthy level of hydration. Evidence from the UK National Patient Safety Agency's (NPSA) National Reporting and Learning System has identified dehydration as a patient safety issue. When all factors are considered a limited understanding of the extent to which hydration of population groups will increase all health-related costs becomes an issue of cost-effective and sustainable health.

A fundamental problem, identified above, is identifying the extent to which a population is poorly hydrated. A cross-sectional survey of 28,000 children, adolescents and adults in 13 countries on 3 continents using a fluid-specific diary over a period of 7 consecutive days is reported<sup>2, 3, 4, 5</sup>. The results indicated that according to the dietary reference values set by the European Food Safety Authority 50% of the women and approximately 60% of the men are at risk of an inadequate fluid intake. In the samples of European children and adolescents noncompliance to the reference values ranged from 34% (Spain) to 94% (Belgium).

Despite this information, it has been reported that patients continue to lack access to fresh drinking water and continued efforts to promote optimal hydration are needed<sup>6</sup>. Furthermore, over 90% of malnourished patients are



cared for in community settings<sup>7</sup>, suggesting that continued efforts for hydration promotion should occur in both hospital and community settings.

There was an increased awareness of the need to accurately assess fluid intake however a variety of methods were still being used to estimate water and fluid intake eg repeated 24 hour recalls, estimated food diaries, food frequency questionnaires<sup>8</sup>. Very few countries describe how they measure fluid intake and variations are seen in the way intakes are quantified and reported. The US Dietary Recommendations for water are based on median water intakes with no use of measurements of hydration of the population to assist. One-time collection of blood samples for the analysis of serum osmolality has been used by NHANES. But at population there is no accepted method of assessing hydration and as Stookey<sup>9</sup> even hypertonicity, is not necessarily linked with hydration in the same direction for all age groups. Recent research suggest that, at individual level, “optimal hydration” from a physiological point of view

can be assessed using 24h urine osmolality ( $\leq 500\text{mOsm}\cdot\text{kg}^{-1}$ ) as an indicator of

total daily fluid intake adequate to compensate for daily losses<sup>10</sup>.

A seminar on health hydration and the dietetic reaction is required to review and discuss current knowledge and practice when using an evidence based approach to health and hydration.

During this symposium the following will be discussed;

- Fluid intake in Europe – how can we measure water and fluid intake and applicability to current recommendations? Joan Gandy, PhD RD FBDA
- Importance of fluid intake consumption data for public health. Isabelle Guelinckx, RD MSc PhD
- Hydration and vasopressin, from regulator to disease predictor for diabetes and cardio-metabolic risk. Olle Melander, MD PhD
- Hydration: Knowledge, Attitudes, and continuing professional development of dietitians. Pauline Douglas BSc RD FBDA

## References

1. Gibson-Moore H (2014) “Hydration and health,” *Nutrition Bulletin*, 39: 4–8
2. Ferreira-Pego C, et al. (2015) Total fluid intake and its determinants: cross-sectional surveys among adults in 13 countries worldwide. *EJN* 54 Suppl (2), 35-43
3. Guelinckx I, et al. (2015) Intake of water and different beverages in adults across 13 countries. *EJN* 54 Suppl(2), S45-S55
4. Guelinckx I, et al. (2015) Intake of water and beverages of children and adolescents in 13 countries. *EJN* 54 Suppl(2), S69-S79



going to sustainable eating

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5. Iglesia I, et al. (2015) Total fluid intake of children and adolescents: cross-sectional surveys in 13 countries worldwide. EJM 54 Suppl (2), 57-67
6. Parliamentary and Health Service Ombudsman (2011) "Care and compassion?" Report of the Health Service Ombudsman on 10 Investigations into NHS Care of Older People, Parliamentary and Health Service Ombudsman, London, UK,
7. Leach RM, Brotherton A, Stroud M, and Thompson R (2013) Nutrition and fluid balance must be taken seriously Br Med J, 346: f801
8. Popkin BM, D'Anci KE, and Rosenberg IR (2010) Water, Hydration and health. Nutr Rev 68:439-458
9. Stookey JD (2005) High prevalence of plasma hypertonicity among community-dwelling older adults: results from NHANES III. J Am Diet Assoc. 105:1231-1239
10. Perrier TE et al (2015) Twenty-Four-Hour Urine Osmolality as a Physiological Index of Adequate Water Intake. Disease Markers Vol 2015, Article ID 231063, 8 pages <http://dx.doi.org/10.1155/2015/231063>

**Proposed Program**

Title(s)	Time	Speaker(s)
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Water the forgotten nutrient	10 minutes	Anne de Looy
Fluid intake in Europe – how can we measure water and fluid intake and applicability to current recommendations?	25 minutes	Joan Gandy, PhD RD FBDA
Importance of fluid intake consumption data for public health.	25 minutes	Isabelle Guelinckx, RD MSc PhD
Hydration and vasopressin, from regulator to disease predictor for diabetes and cardio-metabolic risk.	25 minutes	Olle Melander, MD PhD
Hydration: Knowledge, Attitudes, and continuing professional development of dietitians.	25 minutes	Pauline Douglas BSc RD FBDA
Final discussion and questions; summary	10 minutes	Anne de Looy

**Please include a picture of the speakers:**



Anne De Looy



Joan Gandy



Olle Melander



Isabelle Guelinckx