Society for Endocrinology – Media Release



For immediate release

SfE response to "Hormone-Mimicking Chemicals Cause Inter-Species Mating"

The following is in response to a press release titled <u>Hormone-Mimicking Chemicals Cause Inter-Species Mating</u> (AlphaGalileo, 11 July 2012).

Professor leuan Hughes, Foundation Professor of Paediatrics at the University of Cambridge; Co-convenor of the Society for Endocrinology Special Interest Group on Endocrine Disruptors said:

"The experiments appear well organised and the results quite clear in terms of changes observed. I note exposure was only to one concentration of BPA so wonder why it was not possible to conduct dose response studies. This is not a study that has relevance to human exposure and therefore human health. What is important to highlight is the potential effects of man-made chemical waste on the bio-diversity of wild life through the hybridisation mechanism the authors talk about. That has to be of concern to environmentalists."

Professor Richard Sharpe, Principle Investigator, MRC Centre for Reproductive Health at the University of Edinburgh; Co-convenor of the Society for Endocrinology Special Interest Group on Endocrine Disruptors said:

"I can only comment very briefly on one aspect, namely the level of exposure. I think the best way to describe it is 'astronomical'.

"They added 1280 g/L (~5M by my maths) which bears no relationship to exposures that occur in the real world. Although the authors did not claim any relevance to humans, others may extrapolate from this study to humans. Therefore, it is appropriate to give this human perspective: the average intake of bisphenol A per day (main route of exposure is oral, via food/drink) is 0.02-0.3ug/kg/day, resulting in blood/urine levels in the pM range. It's not easy to compare this with fish exposure as they are literally bathed in it, but just simple maths says human exposure is at least 10 orders of magnitude lower. In other words, this study has no human health relevance. These sorts of doses may be useful for teasing out mechanisms/pathways in fish mating behaviour but in the wild such levels of bisphenol A would never occur unless there was a spillage!"

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Notes for editors:

The Society for Endocrinology is UK's largest national organisation promoting endocrinology and hormone awareness. For general information, please visit our website: www.endocrinology.org

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For information on hormones and endocrine conditions, please visit You & Your Hormones (www.yourhormones.info), the Society for Endocrinology's public information website.