

Virginijus Sinkevičius  
European Commissioner for the Environment  
Rue de la Loi 200,  
1049 Bruxelles, Belgium

7 July, 2022

**Re: Natural products as endocrine-disrupting chemicals (EDCs)**

Dear Commissioner Sinkevičius,

On behalf of the Endocrine Society, I am writing to you today to clarify how the Society characterizes endocrine-disrupting chemicals (EDCs) with respect to products such as essential oils. As defined in our Position Statement, an EDC is "an exogenous chemical, or mixture of chemicals, that can interfere with any aspect of hormone action. These can include natural or manufactured chemicals, such as pesticides, biocides, plastics, food contact materials, cosmetics, and others<sup>1</sup>." As our definition is based on the effect of the chemical, we make no distinction between natural products such as essential oils or phytoestrogens, and manmade chemicals, such as bisphenols and phthalates. We further note that natural products used in consumer goods are often highly enriched versions of substances; in this context they may therefore also be considered manufactured products.

While we recognize that the evidence base is limited, recently published studies have suggested that essential oils such as lavender and tea tree oil may have estrogenic properties with effects in humans<sup>2</sup> and animals<sup>3</sup>. To ensure that the proposals delivered by the Commission are able to minimize the harmful effects of endocrine disruption on public health and the environment, we encourage you to consider policies that evaluate chemicals based on their effects instead of their origin.

Thank you for considering our comments, if we can be of any further assistance, please contact Joe Laakso, PhD, Director of Science Policy at [jlaakso@endocrine.org](mailto:jlaakso@endocrine.org).

Sincerely,

Prof. Anne-Simone Parent, MD, PhD  
Chair, Endocrine Society European Union EDC Task Force

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<sup>1</sup> [https://www.endocrine.org/-/media/endocrine/files/advocacy/position-statement/position\\_statement\\_endocrine\\_disrupting\\_chemicals.pdf](https://www.endocrine.org/-/media/endocrine/files/advocacy/position-statement/position_statement_endocrine_disrupting_chemicals.pdf) Revised May, 2018. Accessed 5 July, 2022.

<sup>2</sup> J Clin Endocrinol Metab. 2019 Nov 1;104(11):5393-5405. doi: 10.1210/jc.2018-01880.

<sup>3</sup> J Korean Med Sci. 2022 Jan 10;37(2):e9. doi: 10.3346/jkms.2022.37.e9.