## ADVERSE REACTIONS TO BOTANICALS USED AS SUCH OR AS INGREDIENTS OF FOOD SUPPLEMENTS

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Botanicals and Plant Food Supplements (PFS) have received an increasing interest by consumers. They are not intended to treat diseases, but their activity should contribute to maintain the homeostasis. Due to the general belief that "Natural is always safe", the risk associated with the intake of PFS is often underestimated by consumers.

To collect new information about the risk associated with the PFS consumption, different activities were performed during and after the EU project PlantLIBRA (Plant Food Supplements: Levels of Intake, Benefit and Risk Assessment, n. 245199):

1. A review of the published data on: adverse effects related to PFS/botanical ingredients, botanical misidentification, and the interactions of PFS/botanicals with pharmaceutical drugs or nutrients;

2. The collection of cases occurred at the European Poisons Centres (and a Brazilian centre);

3. The elaboration of self-reported adverse effects cited during the European PlantLIBRA PFS Consumer Survey 2011-2012;

4. After the end of the project, further data were supplied by the Pavia Poison Centre and ANSES (Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail);

5. Finally, information were collected by the FDA website.

According to all data collected and elaborated during and after the European Project PlantLIBRA:

1. Valeriana officinalis (valerian) and Camellia sinensis (green tea) were the plants most frequently involved in adverse effects in Europe;

2. Cases from the FDA's website were mainly associated with Silybum marianum (milk thistle) and Serenoa repens (saw palmetto);

3. Although most case reports described mild symptoms, some severe events was observed, with few fatalities;

4. Symptoms were mainly localized at liver, gastrointestinal and nervous systems.

As described above, some severe adverse effects with convincing causality were described, so that family doctors and other health professionals must be aware of the problem and contribute to the surveillance.

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## References

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