

Shea cake exploitation potential in the management of disease linked to oxidative stress : DPPH reduction power of protein and polyphenolic extracts of shea cake

DJOMAN Ahouman Elisée Silas

UFR Biosciences, Université Félix Houphouët Boigny 22 BP 582 Abidjan 22, Côte d'Ivoire

Shea (*Vitellaria paradoxa*, Gaertn C.F) kernels contain protein and bioactive compounds which would remain in shea press cakes. However can she press cake to valorize in the management of metabolic and oxydative stress disturbance? The present study aimed to highligh the antioxydant and hyperglycemy modulating powers of protein and hydromethanolic compounds extracted from shea press cake. Therefore, alpha-amylase/alpha-glucosydase inhibition and DPPH radical reducing powers of both extracts were mesured. Both protein and hydromethanolic extracts reduced significantly DPPH radical at 38 and 76 % respectively. The also inhibited alpha-amylase and alphaglucosidase activities, with higher inhibition efficiency registered by hydromethanolic (42.61 and 97.47 % versus 21.83 and 82.02 %) extracts. However both extracts inhibition power on alphaglucosidase were stronger than alpha-amylase one. Shea press cake can, thus be considered as an usefull source of bioactive compounds which might be exploited for pharmarceutical purpose ; they can be validy exploited in the management of diabet and other disturbances linked to oxydative stress. Key words : Antioxidant power, shea cakes, protein/polyphenolic extracts, DPPH.

Biography

DJOMAN Ahouman Elisée Silas is a PhD student at Biosciences faculty of University Félix Houphouët Boigny. He has a Master of Biotechnology-Biosafety-Bioresources at the same University. He has participated and communicated at many seminars. Reccentlu, he was at "Journées de Valorisation des Substances Naturelles d'Intérêt" (Days for Valorisation of Natural Substances of Interest) which took place at University Jean Lorougnon GUEDE in January 2021(15th and 16 th) (Daloa- Côte d'ivoire).