

FLEUROTUS OSTREATUS SENSE OF HEALING IN MALAYSIA: SYSTEMATIC REVIEW- GTM

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ABSTRACT: Pleurotus ostreatus (P ostratus) sense of healing, potentially penetrates a great market toward future healing in health care. Statement problem. Stress influencing diseases, economic stress impact health and young education. Significant of the research. Need and demand in the community for trial. research objective general; to explore the potential P ostreatus market value. Research objective specific: RO1 to identify beneficial effect P Ostreatus in healing purposes. RO2 what are the economic potential impact P. ostreatus to human need for quality living. Research question RQ1 what are the beneficial P. ostreatus to human need. RQ2 what will be the potential market available. Human health strength, economic strength and style of living using positive word and sound to grow P. ostreatus in order to have good and quality product. definition of terminology. P osteatus defines as oyster musroom, healing Conceptual; framework developing theory. Operational concept conceptual framework model pertinent to independence variable and dependence variable application processes in mini project. Limitation: economic and funders interest for study purposes to run the activities. Literature review: 13-20 papers review under 5-years inclusive updates study accepted Mendeley retrieval data based. Using Methodology. GTM application Emoto study on water bring sense of healing. compares between different method of application. Using sense of positive growth to have value of P Ostreatus product. Philo assumption axiological role of value and interpretation

KEYWORDS: *Pleurotus ostreatus; Healing; Healthcare; Apoptosis; Emoto*

1.0 INTRODUCTION

World market Pleurotus ostreatus (P ostratus) sense of healing, potentially penetrates a great market toward future healing in health care Many study proven Pleurotus Ostreatus Polysaccharide (POP) exhibited hepatoprotective effects on CCl₄ -induced ALI, and the underlying mechanism is correlated with antioxidants that regulate metabolic pathway disorders and alleviate liver mitochondria apoptosis. P. osteatus sense of healing in health, proven from the study seem penetrated the industrial of fresh vegetable from farm to mini kitchen plantation toward future P. ostreatus extract for health demand. Projected in the study P ostratus design in new method or delivery to the patient and customer. People born with power of love and strength of living, to keep in healthy using natural extract and plantation in technology method good for all.

Currently pharmaco value shown penetrating world market taking place in industrial business of health, experimental data collected in the present study support the use of these mushrooms specially L. utiforme and A. campestris as functional foods for the management and/or prevention of diabetes type II, Alzheimer's disease, and oxidative stress related complications supported by Akata in 2019. However, Huang believe the polysaccharide contained in mushroom is regarded as one of the primary bioactive constituents and is beneficial for health Pleurotus ostreatus sense of healing inspires Zhu in 2019 was conducted to evaluate the hepatoprotective effect of Pleurotus ostreatus polysaccharides (POP) study on carbon tetrachloride-induced acute liver injury (ALI) in rats. Despite of POP exhibited hepatoprotective effects on CCl₄ -induced acute liver injury, and the underlying mechanism is correlated with antioxidants that regulate metabolic pathway

disorders and alleviate liver mitochondria apoptosis. Zhu in 2019 chemical power of pleurotus sense positively toward healing process. Golan in 2011 proven the potential of using *P. ostreatus* for bioremediation systems. strongly *P. ostreatus* sense of healing bring power of beneficial to those indicated of metabolic disorder such as tachycardia, palpitation, hormonal disorder indicated responses.

Nutra ceutical food power of cancerous fighter shown *Pleurotus ostreatus* sense of healing inspires many researchers to explore more Food Science & Nutrition industry. Sharif et al, 2018; Badalyan 2014; Boh, 2008) agreed and documented *P. ostreatus* power one of the power element to human in healing process, proven by study evidence as nutraceutical foods because of their high nutritional and functional values. *P. Ostreatus* inspires many medicinal properties, economic importance, and organoleptic merit. In this study exploration journey in wild *Ganoderma lucidum* and four commercial mushrooms, that is, Sharif et al (2018) consider *P.ostreatus* sense of cancerous fighter, antiproliferative effect, clot lysis effect and immunity defence toward healthy of living. Whereas Badalyan in 2014 shown proven in low fat, higher protein and vitamin content, such as several element of substantial amount of dietary fibres which produces valuable enzymes in different therapeutic effect. Boh in 2008 using *P. ostreatus* for anticancerous, immunostimulant in angiogenesis process in human body as reduction of benign prosthetic hyperplasia, anti-viral, anti-bacteria, anti-oxidant properties and beneficent to cosmetic to skin product. Boh in 2008 believe and supported by vamanu in 2014 agreed extract of tocopherol acetate known to play a significant role as an antioxidant in skin protection against oxidative stress generated by UV rays was determined.

The *P. ostreatus* and cholesterol impact the present intervention study for the first time investigated the *P. ostreatus* effected cholesterol level to human. Schneider 2011 prove the *p. ostreatus* lowering cholesterol properties in dieting human intakes. He believes mushroom have a great therapeutic effect application to human need as anti-obesity, anti-diabetes, anti-cancerous, while modulate immune body, hypocholesteraemia which sense of various beneficial effect to human need in health for safety practice as a routine healthy life style. *P. ostreatus* and thermology impact pharmaco value *p. ostreatus* seem have sensivity reaction to thermo level of effect which induces apoptosis in erythroleukemia condition, however (Ebraimi in 2018; Suherah 2018) agreed *P. ostreatus* have potential market in healing energy by using controlled temperture while developing *P. ostreatus* essential. to moving forward and challenge fresh Malaysia plantation of market value for long term. The value of *P. ostreatus* well established in 2017 in berlin study challenge antibiotic product with other antibiotic product emphases of degradation of ciprofloxacin (CIP) by a rot fungus study supported (Singh 2017; Sun 2017) believe *P. ostreatus* study resulted *ostreatus* useful drug-resistant microbes. Which bring many beneficial outlook medicinal purposes These findings provide novel insights into the decomposition and cross-coupling of TC in a multi-solute natural aquatic environment by laccase-based catalyzed oxidative processes sun in 2017 believe the power of *p. ostreatus* in platelet effect to ur patient or patient seek which the most medication power in healing. The study demonstrated the potential application of *Pleurotus* mushrooms as functional food products bio-enriched with essential elements. ROS inhibition by extracts of these mushrooms may be useful in control of platelets activation cascade (Poniedzialek et al., 2017).

People prefer comtemporary and simple in healthy living Ng in 2017 found some group of pleurotus such as family effect of four cooking method, the time of cooking impact namely *Agaricus bisporus*, *Flammulina velutipes*, *Lentinula edodes*, *Pleurotus ostreatus* and *Pleurotus eryngii* the ascorbic acid in the mushroom and other pressure application to mushroom impact the Optimised cooking method including pressure cooking could increase the antioxidant values in the edible mushrooms.(Ng and Tan, 2017)

3.0 RESULTS AND DISCUSSION

World challenge of the international value in *P. ostreatus* breaking the researcher on *P. ostreatus* in their study in experimental data in the present study support the use of these mushrooms specially *L. utriforme* and *A. campestris* as functional foods for the management and/or prevention of diabetes type II, Alzheimer's disease, and oxidative stress related complications as Akata in 2019. The polysaccharide contained in mushroom is regarded as one of the primary bioactive constituents and is beneficial for health. Huang and Nie discussed on the low fat, high protein and vitamins contents. Mushrooms contain several minerals and trace elements, as well as substantial amount of dietary fibers. Basidiomycetes mushrooms (phylum Basidiomycota) including agaric and bracket fungi are also producers of bioactive molecules and valuable enzymes with different therapeutic effects (Badalyan, 2014).

4.0 SUMMARY

The *P. ostreatus* in pharmaceutical power outlook currently pharmaco value shown penetrating world market taking place in industrial business of health, *P. ostreatus* sense of healing, generates a great market to current need and future healing in health care. Statement problem of the paper stress influencing diseases, economic stress impact health and young education influencing quality of human performance on health. Significantly research seems need and demand in the group for trial. research objective general; to explore the potential *P. ostreatus* market value. Research objective specific: RO1 to identify beneficial effect *P. Ostreatus* in healing purposes. RO2 what are the economic potential impact *P. ostreatus* to human need for quality living. Research question RQ1 what are the beneficial *P. ostreatus* to human need. RQ2 what will be the potential market available. Human health strength, economic strength and style of living using positive word and sound to grow *P. ostreatus* in order to have good and quality product. definition of terminology. *P. osteatus* defines as oyster musroom, healing Conceptual; framework developing theory. Operational concept conceptual framework model pertinent to independence variable and dependence variable application processes in mini project. Limitation: economic and funders interest for study purposes to run the activities. Literature review: 13-20 papers review under 5-years inclusive updates study accepted Mendeley retrieval data based. Using Methodology. GTM application Emoto study on water bring sense of healing. compares between different method of application. Using sense of positive growth to have value of *P. Ostreatus* product. Philo assumption axiological role of value and interpretation. Hypothesis: the more positive sense of develops product the more value of product

5.0 REFERENCES

- Ebrahimi, A., Atashi, A., Soleimani, M., Mashhadikhan, M., Barahimi, A., & Kaviani, S. (2018). Comparison of anticancer effect of *Pleurotus ostreatus* extract with doxorubicin hydrochloride alone and plus thermotherapy on erythroleukemia cell line. *Journal of Complementary and Integrative Medicine*. <https://doi.org/10.1515/jcim-2016-0136>
- Golan-Rozen, N., Chefetz, B., Ben-Ari, J., Geva, J., & Hadar, Y. (2011). Transformation of the recalcitrant pharmaceutical compound carbamazepine by *pleurotus ostreatus*: Role of cytochrome P450 monooxygenase and manganese peroxidase. *Environmental Science and Technology*. <https://doi.org/10.1021/es200298t>
- Minov, J., Bislimovska-Karadzinska, J., Petrova, T., Vasilevska, K., Stoleski, S., & Mijakoski, D. (2017). Effects of Pleuran (B-Glucan from *Pleurotus Ostreatus*) Supplementation on Incidence and Duration of COPD Exacerbations. *Open Access Macedonian Journal of Medical Sciences*. <https://doi.org/10.3889/oamjms.2017.198>

Mleczek, M., Siwulski, M., Rzymiski, P., Budzyńska, S., Gąsecka, M., Kalač, P., & Niedzielski, P. (2017). Cultivation of mushrooms for production of food biofortified with lithium. *European Food Research and Technology*. <https://doi.org/10.1007/s00217-016-2823-9>.

Ng, Z. X., & Tan, W. C. (2017). Impact of optimised cooking on the antioxidant activity in edible mushrooms. *Journal of Food Science and Technology*. <https://doi.org/10.1007/s13197-017-2885-0>

Owaid, M. N., Al Saeedi, S. S. S., Abed, I. A., Shahbazi, P., & Sabaratnam, V. (2017). Antifungal activities of some pleurotus species (higherlx basidiomycetes). *Walailak Journal of Science and Technology*.

Pasnik, J., Ślęmp, A., Cywinska-Bernas, A., Zeman, K., & Jesenak, M. (2017). Preventive effect of pleuran (β -glucan from *Pleurotus ostreatus*) in children with recurrent respiratory tract infections - Open-label prospective study. *Current Pediatric Research*.

Poniedziałek, B., Mleczek, M., Niedzielski, P., Siwulski, M., Gąsecka, M., Kozak, L., ... Rzymiski, P. (2017). Bio-enriched *Pleurotus* mushrooms for deficiency control and improved antioxidative protection of human platelets? *European Food Research and Technology*. <https://doi.org/10.1007/s00217-017-2921-3>

Sharif, S., Atta, A., Huma, T., Shah, A. A., Afzal, G., Rashid, S., ... Mustafa, G. (2018). Anticancer, antithrombotic, antityrosinase, and anti- α -glucosidase activities of selected wild and commercial mushrooms from Pakistan. *Food Science and Nutrition*. <https://doi.org/10.1002/fsn3.781>

Singh, S. K., Khajuria, R., & Kaur, L. (2017). Biodegradation of ciprofloxacin by white rot fungus *Pleurotus ostreatus*. *3 Biotech*. <https://doi.org/10.1007/s13205-017-0684-y>

Suherah, Kuswinanti, T., Rosmana, A., & Rasyid, B. (2018). The effect of organic medium use in formulation of *trichoderma harzianum* and *pleurotus ostreatus* in viability and decomposition of cacao pod husks waste. *Pak. J. Biotechnol.*

Sun, K., Huang, Q., & Li, S. (2017). Transformation and toxicity evaluation of tetracycline in humic acid solution by laccase coupled with 1-hydroxybenzotriazole. *Journal of Hazardous Materials*. <https://doi.org/10.1016/j.jhazmat.2017.02.058>

Zhu, B., Li, Y., Hu, T., & Zhang, Y. (2019). The hepatoprotective effect of polysaccharides from *Pleurotus ostreatus* on carbon tetrachloride-induced acute liver injury rats. *International Journal of Biological Macromolecules*. <https://doi.org/10.1016/j.ijbiomac.2019.03.043>