

A Human Volunteer Study of Nutraceutical Product 'Rekindle for Men'

(Rekindle for Men: Good Dietary Supplement for Men)

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Abstract:- Successful randomized observational data provide strong experimental evidence to prove the efficacy of Rekindle for Men. Arelang Naturals Private Limited brings natural ingredients for immunity and to promote the overall well-being of Men's health. Nutritional supplements from plant-based enriched extracts have been used in the form of a cocoa bars. Rekindle for men is a nutraceutical product comprising Safed musli (*Chlorophytum borivillinum*), Ashwagandha (*Withania somnifera*), Ginseng (*Panax ginseng*), Gokhru (*Tribulus terrestris*), Vidarikand (*Pueria tuberosa*), Kapikacchu (*Mucuna pruriens*), Jaiphall (*Myristica fragrans*), Ginkgo biloba and Saffron (*Crocus sativus*) which help in elevating mood, energy and primal impulses. The present study will help in knowing the use of a nutritional supplement in cocoa bars chocolate form for men's health. The data is statistically significant and enough for assessing the effect of nutritional supplements on better health and overall immunity.

Keywords:- Nutraceuticals, Nutritional Supplements, Plant-Based Extracts, Arelang Naturals, Men's Health.

I. INTRODUCTION

Many health problems are related to changes in lifestyle and dietary factors. Increasing trends in fertility are associated with psychological stress, hormonal imbalance and environmental factors etc., along with disease condition^{1,2}. The most common fertility issue is the inadequate production of sufficient normal, motile (moving) sperm in men. In Asia, from ancient days, herbal medicines have persisted to use in fertility and its related problems. Ashwagandha (*Withania somnifera*)³, Safed musli (*Chlorophytum borivillinum*)^{4,12}, Ginseng (*Panax ginseng*)⁵, Gokhru (*Tribulus terrestris*)⁶, Kapikacchu (*Mucuna pruriens*)⁷ works on integrated medicines. These medicinal plants, which has been mentioned in the treatises of ancient Indian texts such as the 'Charaka Samhita' and the 'Susrutha Samhita' in 1500BC. The listed plants offer natural conventional aphrodisiac effects and improve fertility,

impaired libido, sexual weakness, erectile dysfunction, ejaculatory disorders and defective sperm production (azoospermia, oligospermia), etc.^{8,9}. Various scientific literatures reported that the plants showed pharmacological mechanisms for male reproductive health. Saffron administration improves sperm parameters in mice, probably through increasing blood testosterone levels. Studies have shown that supplementation with Ashwagandha in men led to a significant increase in testosterone levels. Information obtained from different research-based active chemical phytochemicals; like stigmasterol is structurally related to that of testosterone and mainly contributes to its aphrodisiac potential.^{4,11,12,13} Its analogues enhance the plasma concentration of testosterone which could potentiate sexual activity in men.^{9,10,11,12} Nowadays in the market many Ayurvedic products comprise multiple supplements and help to boost testosterone & improve endurance during performance. Most of nutraceutical products include Ginseng, Gokhru, Ginkgo biloba, B complex, vitamins/trace minerals, fenugreek etc. in the form of powder, capsules, or tablets. Arelang Naturals Private Limited implements a unique idea to introduce nutraceuticals in the form of cocoa bars. Observational studies typically use self-administered questionnaires to obtain information of the experiment undertaken.

Ashwagandha significantly attenuates its spermatogenic activity via increased volume of semen, quality of semen and sperm motility. Ashwagandha also possesses relaxation, potent sedative, rejuvenate, and life-prolonging properties^{15,16}. Safed musli (*Chlorophytum borivillanum*) enhances the sexual arousal, vigor, and libido in Wistar rats¹⁷. Ginsenosides are known to be the active phytoconstituents of ginseng; it exerts a vascular relaxation effect by NO release, so traditionally used in the treatment of erectile dysfunction^{5,18}. Karimi et.al. previously proposed the effect of *Tribulus terrestris* by increasing the number of primary spermatocytes in rats, so it can be used in the treatment of male fertility¹⁹.

➤ *Objectives of the Study*

The primary objective of the trial is to assess the usefulness of nutraceutical cocoa bar for improving energy level by volunteers and other related parameters of testosterone level in men

➤ *Statistical Analysis*

Statistical analysis of data was performed using the t-test using the Graph pad prism software version 8.0 (Trial version)

II. MATERIAL & METHOD

An informal study was undertaken in human volunteers (104 Numbers) with 1 bar per day for time period ranging from 30 days to 60 days. They were asked to rate on a scale of 1-10 for the product on the following parameters: Boost in energy level, Sleep patterns (Effort in falling asleep, Sleep quality, and Wake-up Fresh), Endurance, Libido, and Mood Elevation. The study was carried out in the age group of 20-60+.

III. RESULT & DISCUSSION

The various age groups of men were the subject of descriptive research. Information was gathered about the following parameters using a self-administered paper-based questionnaire: Boost in energy level, Sleep patterns (Effort in falling asleep, Sleep quality, and Wake-up Fresh), Endurance, Libido, and Mood Elevation. The observations are reported in Table no. 1

Table 1 Parameters Checked of Cocoa Bar on Different Age Groups of Men

Age Group (Participants)	20-35	36-45	46-60	60+	Total
Functions	(17) no's	(30) no's	(51) no's	(6) no's	(104) no's
<i>Boost in Energy Levels</i>	8.44	8.15	8.27	8.50	8.28
<i>Sleep Patterns</i>					
<i>Effort in falling asleep</i>	8.10	7.21	7.25	7.54	7.39
<i>Sleep Quality</i>	8.40	7.86	7.75	8.04	7.91
<i>Wake-up Fresh</i>	8.22	7.35	7.51	7.46	7.58
<i>Endurance</i>	7.72	7.37	6.94	7.13	7.20
<i>Libido</i>	8.21	7.29	6.04	5.67	6.74
<i>Mood Elevations</i>	8.21	7.34	6.83	6.54	7.19

Worldwide, more than half of all adults claim to use nutritional supplements for better health. This rising interest in the health benefits of plant-based natural products. Pharmaceutical studies record the safety and effectiveness of a given drug for a specified indication, whereas human trials for nutraceuticals are intended to assess and support specific marketing claims. Furthermore, as nutraceutical studies record human experiences with dietary changes in the context of modern nutrition as opposed to drug trials, which assess a medicine's safety and effectiveness in treating a particular ailment, they may be more realistic than drug trials.^{20,21,22}

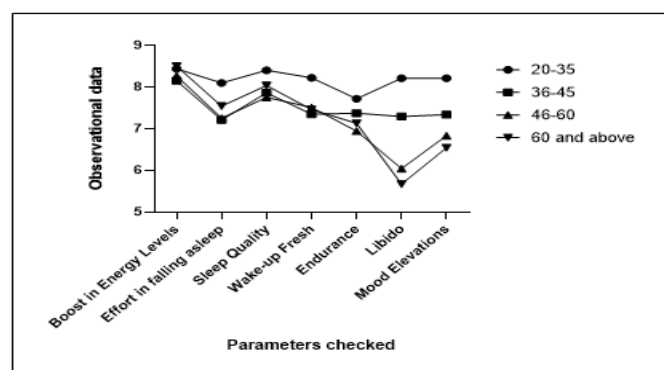


Fig. 1. Comparison of Observational Data Among Different Age Groups

A significant difference showed in all the age groups as below.

Table 2 Statistical Representation of Rekindle for Men among the Age Groups

One simple t-Test				
<i>The age group of Participant</i>	20-35	36-45	46-60	60+
<i>SD of discrepancy</i>	0.2371	0.3523	0.7177	0.9423
<i>SEM of discrepancy</i>	0.08960	0.1331	0.2713	0.3561
<i>95% confidence interval</i>	7.966 to 8.405	7.184 to 7.836	6.563 to 7.891	6.397 to 8.140
<i>R squared (partial eta squared)</i>	0.9993	0.9981	0.9916	0.9858
<i>P value (two-tailed)</i>	<0.0001	<0.0001	<0.0001	<0.0001
<i>P value summary</i>	****	****	****	****
<i>Significant (alpha=0.05)?</i>	Yes	Yes	Yes	Yes

The observed data in Fig.1 and Table 2, revealed that all the age groups were statistically significant for product activity calculated by a simple t-test.

IV. CONCLUSION

The study outcome indicates that for the age group between 20-35, the product was found to be working excellent on all the parameters. Boost in energy level was found to be high in all age groups of 36-60+. While Sleep patterns, Endurance, Libido and Mood elevation parameters, all age groups showed fairly good responses. We would like to conclude, that the product Rekindle for Men is found to be working well on all functional parameters for which the product has been intended.

ACKNOWLEDGMENT

- Informed Consent: Written informed consent was obtained from all study participants.
- Conflict of Interest: - Authors have no conflict of interest to declare.

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Fig.2 Graphical Abstract of Medicinal Plants Added to the Cocoa Bar with its Usage (PC:- <https://Arelang.Com/>)