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## Evaluation of Anti-inflammatory/Anti-Oxidant Effects of the Herbal Formulation Zeroblock Tea

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### Abstract

The present study investigates the effect potential and safety profile of poly herbal formulation “Zeroblock Tea” A Tiasan Premix, which contains the extracts of:

Arjuna bark (Arjuna Terminalia) - 200 mg, Cinnamon (Cinnamomum Zeylanicum) - 100 mg, Licorice (Glycyrrhiza glabra) - 100 mg, Ashwagandha (Withania somnifera) - 50 mg, Green Tea (Camellia sinensis) - 50 mg, Ginger (Zingiber officinale Roscoe) - 50 mg, Black Pepper (Piper Nigrum) - 50 mg, Cumin (Cuminum cyminum) - 25 mg, Clove (Syzygium aromaticum) - 15mg, Cardamom (Elettaria cardamomum) -10 mg, Black Salt (Himalayan Black Salt) - 50 mg, Lemon (Citrus Limon) QS

**Keywords:** Hypercholesterolemia, Hypertension, BM, Mood elevator, QOL, Basal Metabolic rate, weight Management, anti toxin

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### Introduction

Terminalia Arjuna herb extract helps to improve energy levels in the body and boosts stamina. Arjuna tree bark extract has tannins that act as an important anti-oxidants for the body, which is very useful for the heart muscles.

Ashwagandha contains chemicals that might help calm the brain, reduce swelling, lower blood pressure, and alter the immune system. Since ashwagandha is traditionally used as an adaptogen, it is used for many conditions related to stress. Adaptogens are believed to help the body resistance, physical and mental stress.

Cinnamon extract trans-Cinnamaldehyde (CA) is the main bioactive component of cinnamon extract obtained from the stem bark of Cinnamomum cassia Blume. CA shows diverse biological activities in diabetes, neuropathy, cardiovascular diseases, and cancer in particular.

Licorice licorice root is promoted as a dietary supplement for conditions such as digestive problems, menopausal symptoms, cough, and bacterial and viral infections. Licorice gargles or lozenges have been used to try to prevent or reduce the sore throat that sometimes occurs after surgery.

Green tea Many studies have shown that green tea extract can promote weight loss, blood sugar regulation, disease prevention, and exercise recovery. It can also help keep your skin and liver healthy, reduce blood fat levels, regulate blood pressure, and improve brain health. It can be consumed in capsule, liquid, or powder form.



Ginger People commonly use ginger for many types of nausea and vomiting. It's also used for menstrual cramps, osteoarthritis, diabetes, migraine headaches, and other conditions, but there is no good scientific evidence to support many of these uses. There is also no good evidence to support using ginger for COVID-19.

Black Pepper Black pepper and its active compound piperine may have potent antioxidant and anti-inflammatory properties. Laboratory studies suggest that black pepper may improve cholesterol levels, blood sugar control, and brain and gut health.

Cumin For generations, people have used cumin to treat conditions ranging from indigestion and diarrhea to headaches. People in India have used it to treat kidney and bladder stones, eye disease, and even leprosy. Now, scientific research is finding evidence that backs up many of these traditional uses.

Clove Cloves contain a lot of manganese, a mineral that helps your body manage the enzymes that help repair your bones and make hormone.

Manganese can also act as an antioxidant. Cloves are good source of vitamin K.

Cardamom: Cardamom aids digestion, Freshens breath, helps balance blood pressure, helps in bronchitis, improves circulation, alleviates gastrointestinal discomfort, helps treat stomach ulcers.

Black salt: Black salt helps in weight management, cures acidity, acts as a laxative, promotes hair growth, helps to reduce heart burn by stimulating bile production in the liver.

Lemon: A huge source of Vit C, supports heart health, boosts immunity, may improve digestion, helps to control weight, may help in oral disorders, helpful in keeping good skin conditions, may help in hypertension in check, may prevent in kidney stone situation, in throat infections etc.

The present study investigates the Anti-inflammatory /Anti-oxidant effect potential of herbal formulation Zero Block Tea.

**Composition of Zero Block Tea**

Sr. No.	Ingredient	Latin name	Part of plant	Quantity
1	Arjun Bark	Terminalia Arjuna	Bark	200 mg
2	Cinnamon	Cinnamomum zeylanicum	Bark	100 mg
3	Licorice	Glycyrrhiza glabra	Fabaceae	100 mg
4	Ashwgandha	Withania somnifera	Root	50 mg
5	Green Tea	Camellia sinensis	plant	50 mg
6	Ginger	Zingiber officinale	Horizontal stem	50 mg
7	Black Pepper	Piper nigrum	Pepper plant	50 mg
8	Cumin	Cuminum cyminum	Seed	25 mg
9	Clove	Syzygium aromaticum	flower buds	15 mg
10	Cardamom	Elettaria cardamomum	seeds and pods	10 mg
11	Black Salt	Himalayan black salt	Bark	50 mg
12	Lemon	Citrus limon	Plant, fruit	Q.S.

### Objective

To evaluate the efficacy and safety profile of Zero block Tea for Heart Care and overall health status, being a naturally rich formula as anti oxidant & anti inflammatory blend on Cholesterol and hypertension Levels, Basal Metabolic rate, weight Management, toxins, Digestion, Energy level & Mood elevation and better QOL.

To discard the harmful effects of the routine milk tea



**Review**

**A) Drug:** Zeroblock Tea 1G Dry Powder extract of  
**Arjuna bark (Arjuna Terminelia) - 200 mg, Cinnamon (Cinnamomum Zeylanicum)- 100mg**  
**Lucorice (Glycyrrhiza glabra)- 100mg , Ashwagandha (Withania somnifera)- 50mg**  
**Green Tea (Camellia sinensis )- 50mg, Ginger (Zingiber officinale Roscoe)- 50mg**  
**Black Pepper ( Piper Nigram)- 50mg, Cumin (Cuminum cyminum)25mg**  
**Clove (Syzygium aromaticum)15mg, Cardamom (Elettaria cardamomum)10mg**  
**Black Salt (Himalayan Black Salt) 50mg, Lemon (Citrus Limon) QS**

**Pathophysiology**

Hyperlipidemia, Hypertension, low energy, with/without the Cardiac diabetes history Obesity, Lower QOL and early fatigue

**C) Modern Review:** There has been significant increase in the incidences of Hypertension and Hyperlipidemia considerably due to sedentary lifestyle, smoking, alcohol consumption and poor food habits, obesity and rapid unmasking of genetic history. Overall QOL, immunity and resistance are getting hampered for sure.

**Design and Methodology**

**Study design:** Open Label, parallel, randomized, multi centric clinical trial

**Methodology:** Number of subjects: 120 - Study Period: 90 Days

**Diet modification with Brisk walking for half an hour prescribed during the study.**

Dose: Twice a day (1 Gram Powder of Zeroblock Tea in 100 ml hot/ Luke warm water)

Groups:

A) Age up to 30 Years (60 Subjects), B) Age over 30 years Years (60 Subjects)

**All Milk Tea users**

With mild to moderate levels of Total cholesterol, triglyceride, poor HDL:LDL ratio

With and without Obesity, smoking/alcohol intake, sedentary food habits

70% of the subjects were already on anti hypertensive medications

**Observation**

**Zeroblock Tea 1 gram twice a day** initiated with the ease of acceptance by both the groups particularly the intake comfort for its natural taste

**In addition to prescribed diet and brisk waling of 30 minutes a day**

Only around 5% of the subjects expressed that they may include some sweetener however, were not allowed during the study period of 3 months. None of the subjects from both the groups discontinued till the end of the study.

**Results**

Group A & B						
Initial Observations			Average Change from the 1st Visit	Mont End Visit Results		
parameter	Normal range	1st visit Average		1 <sup>st</sup> visit	2 <sup>nd</sup> Visit	3 <sup>rd</sup> Visit
Total Cholesterol	<200 mg/dl	300 +/-50 mg/dl		-25%	-30%	Maintained
Hypertension	120/80	180/100 +/- 30/20		-15%	-20%	-24%
Weight BMI	25	30 +/- 3		-5%	-8%	-20%
Mood Elevation	Ratings+ to5+	2 mean Ave		+++	++++	++++
Energy Levels	Ratings + to 5+	2 mean Ave		+++	++++	++++
QOL	Ratings + to 5+	2 mean Ave		+++	++++	++++

## Discussion

Approximately 60% of the Subjects from both the groups started achieving the benefits in the 1<sup>st</sup> visit itself and overall 70% of the population showed significant reductions by the end of 3<sup>rd</sup> month of the trial period with the strict guidelines in total.

**Overall Zeroblock tea was considered as an encouraging mood/ energy elevator**

**Only around 20% of the subjects remained with the higher BMI 28, they were advised other modes to achieve 25 BMI**

*Zeroblock Tea was found to offer higher feeling of well beingness*

Most of the subjects on other lipid lowering/ antihypertensive agents were quite contented due to the add on with *Zeroblock Tea*

Overall better quality of Life was experienced from the second month of the trial initiation itself which may be due to the increase in immunity and anti inflammatory +anti oxidant effects of *Zeroblock Tea*.

Visceral fat was found to be reduced in 70% of the obese subjects.

10% of the subjects above 60 years of age experienced good laxative effects too.

Overall 70% of the subjects got benefitted in their levels of Cholesterol and HT with dietary precautions and lifestyle modification.

By the end of 3 month intake of Zeroblock Tea Twice a day, Most of the patients got convinced to quit the regular Milk Tea

## Conclusion

Zeroblock Tea is an encouraging product as an add on in addition to ***Diet modification with Brisk walking for half an hour*** daily with lifestyle modification routine for the normal levels of

- 1) **Hypercholesterolemia**
- 2) **Hypertension**
- 3) **Low energy early fatigue**
- 4) **Down mood Lower QOL**
- 5) **Anti-inflammatory/Anti-oxidant effects**

It is suggestive to quit regular Milk Tea and adding Zeroblock Tea in daily routine, *as a preventive therapy/lifestyle modification aid* for those who are with/without cardiac history and finding poor QOL with effective status and safe profile to all above 30years of age.

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