



## A STUDY ON POTENTIAL GROWTH OF COPPER UTENSILS WITH SPECIAL REFERENCE TO COIMBATORE

Ms.A. Aruna      Arumugam.S. S

### Abstract

The study object to analyse about the awareness of copper vessels in daily usage and the benefits of the usage of copper utensils and the number of healthy sources extracted from copper. Copper is an essential hint mineral for survival. It's found in all our body tissues and place a role in making purple blood cells and preserving nerve cells and the immune system. It also allows the body to form collagen and soak up and performs. A position in electricity manufacturing. This study is done on the bases of primary data collected from 130 responses. The study consists of simple percentage, correlation and chi-square for analysis and interpretation.

### Introduction

Copper is considered a critical hint mineral for our frame. It has been used to treatment many illnesses seeing that historical instances. It turned into the metal that added metallurgy to the human race. The lustrous, shiny orange shade and its availability above the floor of the earth brought about its discovery.

It turned into utilized in making tools, jewellery, utensils and also guns. Copper has also been used as a medication to kill germs. Its precise capability to stop the increase of pathogens become observed very early. Ayurvedic use of copper utensils dates back many centuries, and its miles some of the oldest examples of practicing preventative herbal fitness. Copper enhances the Sattva aspect and consequently, its miles used for an all-encompassing source like water. Awakening of the Panchapran transfers the sattvikta (Purity) of food into the frame inside a quick duration.

Copper is an essential hint mineral essential for survival. It is found in all body tissues and plays a role in making purpleblood cells and preserving nerve cells and the immune system. It also allows the body form collagen and soak up and performs a position in electricity manufacturing.

### Fast statistics approximately copper:

- Copper is necessary for various physical capabilities.
- Copper deficiency is uncommon besides in specific conditions, inclusive of Menkes sickness.
- Copper dietary supplements are not usually important and might cause an imbalance.

### Health Benefits of Copper

Copper can definitely affect your power, strength and normal physical appearance. Some of the fitness benefits of copper encompass the following:

- Healthy pores and skin
- Mental clarity
- Absorption of iron
- Boosted immunity
- Smooth digestive float
- Red blood mobile formation
- Anti-infection

Along with nutrients and amino acids, copper is essential to the frame's metabolic procedure. However, the body does now not produce its herbal copper supply, and for that reason the mineral must be culled from out of doors assets — broadly speaking water. When enriched with copper ions, water is one X of the first-rate and purest resources of the mineral. In as low as 4 hours, a bottle complete of water can gain sufficient levels of copper trace factors. Drinking water from copper bottles and glasses has innumerable blessings.



### **Effects of Deficiency Copper**

- Anemia
- Osteoporosis
- Thyroid hassle
- Bone fracture

### **Compact of Copper Utensils**

- Dr.Copper
- Medlife copper
- Indian artwork villa copper
- Divine copper
- Sterlite copper
- Isha copper utensil
- Copperkingpvt ltd

Businesses advantage from eco gracious wherein widespread traits of lucidity, connectivity, and expanded familiarity with maintainability issues add to the general advantage of selling messages. The customers are waiting for and demanding the sustainability-orientated products in a global more candidly involved with health worries. Currently, green have a first-rate opportunity to gain market grip and growth the patron base. In coming days, eco -pleasant may be a important aspect of the commercial global. Copper is your pleasant neighbourhood superhero as a long way as its benefits are taken into consideration, not just to the human body, but to the surroundings too.

### **Objectives of the Study**

- To discover the customers notion in the direction of copper utensil
- To find the consumer satisfaction level of copper utensils
- To find the opportunities for the copper utensils in Indian market
- To find the health satisfaction level of copper utensils
- To locate threat worried in copper utensils

### **Scope of Study**

A look at specializes in customer delight of copper utensils and are research is Coimbatore city. The examiner assignment that the consumer pleasure level and increase copper utensils. This study show that the copper utensils were given a first-rate evaluation from the client after plastic band and they see this as new remedy after plastic band. And client additionally sense that using of copper utensils that part in their fitness improvement. The research will be beneficial in understating blessings the usage of copper utensils and the growth copper utensils in market.

### **Statement of Problem**

The copper utensils are having boom and proper overview a number of the patron and nowadays people are sifting to traditional merchandise like conventional get dressed natural cultivation and organic food with the aid of the identical way even human beings are prepared to apply copper. But the hassle here is that fee of copper is high and keeps of copper is also difficult so this make some purchaser to now not prefer copper.

### **Limitations of the Study**

- The survey is based on the respondents selected at random from Coimbatore city. Hence the end result of the observe can't be generalized.
- The pattern size has been restrained to 130 respondents
- The studies length of study in only for six months.



## Research Methodology

A research methodology or involves specific techniques that are adopted in research process to collect, assemble and evaluate data. It defines those tools that are used to gather relevant information in a specific research study. Surveys, questionnaires and interviews are the common tools of research.

## Sample Design

### Meaning of Sample Design

A sample design is the framework, or road map, that serves as the basis for the selection of a survey sample and affects many other important aspects of a survey as well.

In a broad context, survey researchers are interested in obtaining some type of information through a survey for some population, or universe, of interest. One must define a sampling frame that represents the population of interest, from which a sample is to be drawn.

The sampling frame may be identical to the population, or it may be only part of it and is therefore subject to some under coverage, or it may have an indirect relationship to the population.

## Sample Design

The pattern layout that's used inside the examiner in convenience sampling. Respondents from **Coimbatore** were selected on the primary of comfort.

### Meaning of Sample Size

Sample size is a count the of individual samples or observations in any statistical setting, such as a scientific experiment or a public opinion survey. Though a relatively straightforward concept, choice of sample size is a critical determination for a project. Too small a sample yields unreliable results, while an overly large sample demands a good deal of time and resources. **Sample Size:** Sample size taken for observe is a **hundred and thirty respondents**.

## Source of Data

### Primary data

The primary statistics changed into collected freshly and hence it changed into authentic in character. It has been collected even though questionnaires. The questionnaires. The questionnaires were given the respondents after they visited respective showrooms.

### Secondary Data

When the data is collected by someone else for his research work and has already passed through the statistical analysis is called the secondary data. thus, the secondary data is the secondary data is the secondary data is the second-hand data which is readily available from the other sources.

The secondary data collection involved internet search, book, journals, magazines, newspaper and article and papers related to the women higher education.

## Area of study

The observe was conducted in Coimbatore city.

### Statistical tools

- Percentage
- Chi-square
- Correlation

Prepare the tool for within the responds one thirty contributors to calculate the evaluation within the series organized.



**Tool Used:** This look at deals with various technological equipment to interpret the data collected. After records collection **unique software SPSS sixteen**. Is used to examine the statistics.

**Simple Percentage:** In this project percentage method test was used. The method test was used to know the accurate percentage of the data we took, it is easy to graph out through the percentages. The following are the formula.

$$\text{Percentage} = \frac{\text{Number of Respondents}}{\text{Total Number of Respondent}} * 100$$

From the above table formula, we can get percentages of the data given by the respondents.

**Correlation:** Correlation is usually defines as measure of the linear relationship between two quantitative variables. Generally a slight looser definition is used, whereby correlation simply means that there is some type of relationship between two variables. There are two types of correlation, Positive correlation and Negative correlation.

### Chi-Square

Chi square test has been used to analyse the data. This is an analysis of technique which analyzed the stated data in the project. It analysis the assumed data and calculated in the study. The chi-square test is an important test amongst the several test of significant developed by statistical. Chi-square, symbolically written as  $\chi^2$  (pronounce as ki-square), is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance.

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where  $O_i$ =Observed frequency,  $E_i$ =Expected frequency

Degree of freedom plays an important part in using the chi-square distribution and tests are based on it. The degree of freedom is worked out as follows,

$$d.f = (c - 1)(r - 1)$$

### Chapter Scheme:

CHAPTER 1: This chapter deals with introduction of study, statement of problem, scope of study, limitations of study, objectives of study and research methodology.

CHAPTER 2: This chapter reflects the review of present study.

CHAPTER 3: This third chapter deals with the history of product, competitive companies in the market and benefits and ill effects of product and maintains of product.

CHAPTER 4: This fourth chapter deals with analysis and interpretation.

CHAPTER 5: This fifth chapter deals with findings, suggestions and conclusions.

### Review of Literature

**1.V.B. Preethi Sudha &SheebaGanesan**(2012) Microbially-unsafe water is still a major concern in most developing countries. Although many water-puri-fication methods exist, these are expensive and beyond the reach of many people, especially in rural areas.

Ayurveda recommends the use of copper for storing drinking-water. Therefore, the objective of this study was to evaluate the effect of copper pot on microbial-contaminated drinking-water.



The antibacterial effect of copper pot against important diarrhoeagenic bacteria, including *Vibrio cholerae* O1, *Shigella flexneri* 2a, enterotoxigenic *Escherichia coli*, enteropathogenic *E. coli*, *Salmonella enterica* Typhi, and *Salmonella Pa-ratyphi* is reported.

When drinking-water was contaminated with 500 CFU/mL of the above bacteria and stored in copper pots for 16 hours at room temperature, no bacteria could be recovered on the culture medium. Recovery failed even after resuscitation in enrichment broth, followed by plating on selective media, indicating loss of culturability.

After 16 hours, there was a slight increase in the pH of water from 7.83 to 7.93 in the copper pots while the other physicochemical parameters remained unchanged. Copper content ( $177 \pm 16$  ppb) in water stored in copper pots was well within the permissible limits of the World Health Organization.

Copper holds promise as a point-of-use solution for microbial purification of drinking-water, especially in developing countries.

**2.Cerone et al. (2000)** explained that Cu is an essential trace element that has an important role in many physiological functions in nervous, hematological, cardiovascular, reproduction and immune systems. Moreover, Cu plays a significant role, being associated with specific proteins. The majority of the biological functions of Cu are believed to be associated with copper's role as a ligand in the active site of metalloenzymes. Among the principal enzymes, ceruloplasmin (a plasma glyco-protein, may function as a Cu transport and as an antioxidant), Dopamine-*-*monoxygenase (located in noradrenergic neurons and involved in conversion of dopamine to norepinephrine), Cytochrome-c-oxidase (the terminal mitochondrial electron carrier), lysyl oxidase (responsible for oxidative deamination of peptidyl lysine), Cu- Zn-Superoxide dismutase (a cytosolic protein that speeds up the dismutation of superoxide) and Tyrosinase (located in melanocytes and involved in the conversion of tyrosine into melanin) and Cu is needed for proper development of antibodies and white blood cells, in addition to antioxidant enzyme production (Sharma et al., 2005). Cu deficient goats are more susceptible to be infected by infectious diseases and do not respond as well to the vaccinations, in addition, they tend to be less resistant.

**3.Wyllie (1957)** describe one episode of acute GI symptoms associated with a presumed exposure to copper as a result of mixing alcoholic drinks in a copper-contaminated cocktail shaker. In reconstructing the exposure, the author concluded that the lowest adverse effect level was approximately 5.3 mg in 3/4 fluid ounces or 10.65 mg of copper. However, significant questions have been raised about the suitability of those data for estimating toxic doses of copper (Donohue 1997).

**4.Hopper and Adams (1958)** presented five instances where faulty check valves in vending machines were responsible for carbon dioxide back flow and subsequent build-up of copper in vending machine water lines. The first drink in the morning can have a metallic taste, and cause salivation, nausea, vomiting, epigastric burning, or diarrhea (Hopper and Adams 1958).

**5.Sempleetal. (1960)** reported an outbreak of copper poisoning from ingestion of tea that was contaminated with copper sulfate scale deposited in the water used to make the tea. The authors estimated that the total copper in the suspension was 44 mg/L. That estimate is unreliable, however, because exposure likely occurred after a large portion of the scale was dislodged in the vessel, and the water used to make the tea was not available for analysis. The Centers for Disease Control and Prevention (CDC) reported multiple outbreaks of copper poisoning from ingestion of contaminated beverages (CDC 1974, 1975, 1977, 1996). In most cases, the copper concentration associated with illness was in excess of 30 mg/L. A major incident occurred in 1993–1994, where 43 individuals became ill from a single point source in a hotel. Exposures were estimated to range from 4.0 to 70 mg/L. Recurrent GI illness, including nausea and vomiting, occurred in a Vermont family. Exposure was traced to a build-up of copper in the water overnight.



Copper concentrations reached 7.8 mg/L (with a range of 2.8 to 7.8 mg/L) (Spitalny et al. 1984). Family members had increased copper concentrations in hair, but not blood. Relief of symptoms occurred when their drinking water was replaced by bottled water.

**6.Knobeloch et al. (1994)** investigated five individuals who ingested water above EPA's MCLG of 1.3 mg/L and reported abdominal symptoms. The authors suggested that increased copper in tap water can be a relatively common cause of GI symptoms.parasitic challenge. Goats receiving proper Cu nutrition tend to be less susceptible to infections and have less severe infections when disease does occur.

**7.Roberts et al. (1996)** examined communities made up of more than 100 people in Delaware. They considered communities in which 10% of the water samples, measured during a statewide survey in 1995, had copper concentrations greater than 5 mg/L. Four communities that met that criteria and one trailer park with older homes and acidic water were studied. First morning tap water was collected, and the households with concentrations in excess of 5 mg/L were revisited for study. Residents were interviewed once per week for 12 weeks and asked about GI symptoms.Although people with high concentrations of copper in their drinking water were slightly more likely to report becoming ill at some point during the study, there was no significant association.

1.TABLE SHOWING THE GENDER OF RESPONDANCE				
	Frequen cy	Percent	Valid Percent	Cumulative Percent
Male	75	57.69	57.7	57.7
Female	55	42.31	42.3	100.0
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** The study has been conducted for potential growth of copper utensil in Coimbatore and this survey compresses approximately 58% of the males and rest is females. This shows that male and females are equally participated in a survey.

2. TABLE SHOWING THE SOURCE OF AWARENESS OF COPPER UTENSILS				
	Frequency	Percent	Valid Percent	Cumulative Percent
Social Media	45	34.62	34.62	34.6
Doctors	31	23.8	23.85	58.5
Neighbors	20	15.4	15.38	73.8
Thought word of mouth	34	26.2	26.15	100.0
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation**

From this study it is obvious that, around 35% of the people are aware about the copper utensil through social media, 26% of the people who aware copper utensil through word from mouth and rest are came to known through doctors and neighbors. It is clear that, all the information which are good to health is spread through social media rather those other sources.



**TABLE SHOWING THE PREFER OF COPPER UTENSIL**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	115	88.46	88.46	88.5
No	15	11.54	11.54	100.0
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** The above shows approximately 88% of the people who are giving preference to use copper utensil for they are regular use. Only 12% people are not interested in copper utensil.

**TABLE 4.1.1 TABLE SHOWING THE GENDER OF RESPONDANCE**

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	75	57.69	57.7	57.7
Female	55	42.31	42.3	100.0
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** The study has been conducted for potential growth of copper utensil in Coimbatore and this survey compresses approximately 58% of the males and rest is females. This shows that male and females are equally participated in a survey.

**Table 4.1.2 chart showing the source of awareness of copper utensils**

	Frequency	Percent	Valid Percent	Cumulative Percent
Social Media	45	34.62	34.62	34.6
Doctors	31	23.8	23.85	58.5
Neighbors	20	15.4	15.38	73.8
Thought word of mouth	34	26.2	26.15	100.0
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** From this study it is obvious that, around 35% of the people are aware about the copper utensil through social media, 26% of the people who aware copper utensil through word from mouth and rest are came to known through doctors and neighbors. It is clear that, all the information which are good to health is spread through social media rather those other sources.

**TABLE4.1.3 TABLE SHOWING THE PREFER OF COPPER UTENSIL**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	115	88.46	88.46	88.5
No	15	11.54	11.54	100.0
<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	



**Interpretation:** The above shows approximately 88% of the people who are giving preference to use copper utensil for they are regular use. Only 12% people are not interested in copper utensil.

**TABLE 4.1.4 TABLE SHOWING THE PRICE SATISFACTION COPPER UTENSILS**

TABLE 4.1.4					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Not satisfied	18	13.8	13.85	13.8
	Very much Satisfied	23	17.7	17.69	31.5
	Satisfied	75	57.7	57.69	89.2
	Highly not Satisfied	5	3.8	3.85	93.1
	No Idea	9	6.9	6.92	100.0
	<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** This study shows around 75% of the people are satisfied with the price of copper utensil in which 18% of the people are very much satisfied with the price of copper utensil. Only 11% of the people are worrying about the price of copper utensils, in which 4% of them are not at all, satisfies with the price of copper utensils.

TABLE 4.1.5 TABLE SHOWING THAT FACTORS MOTIVATED TO CHOOSE COPPER UTENSIL					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Health Benefits	81	62.3	62.31	62.3
	Family Tradition	19	14.6	14.62	76.9
	Attractiveness	15	11.5	11.54	88.5
	Prestige	9	6.9	6.92	95.4
	Uniqueness	6	4.6	4.62	100.0
	<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** This study shows that peoples are very much conscious about health, since 62% of the peoples are buying copper utensils because of health benefits. 14% of the people are using copper utensil because their tradition, 12% are using because of attractiveness, 7% are using for the sake of prestige and rest are using for its uniqueness.

**TABLE 4.1.6 TABLE SHOWING THAT SATISFACTION ON MODEL OF COPPER UTENSIL AVAILABLE IN MARKET**

TABLE 4.1.6 TABLE SHOWING THAT SATISFACTION ON MODEL OF COPPER UTENSIL AVAILABLE IN MARKET					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Very Much Satisfied	28	21.5	21.538	21.5
	Satisfied	73	56.2	56.154	77.7
	I Expect New Models	29	22.3	22.308	100.0
	<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	



**Interpretation:** From this study we infer that, approximately 78% of the peoples are satisfied with the available copper model in the market, in which 22% of them are very much satisfied with the available model in the market. There are 22% of the peoples who are not satisfied with the available models of copper utensil in the market and they are expecting different models form the maker side.

**TABLE4.1.7 TABLE SHOWING THAT ALTERNATE PRODUCT INSTEAD OF COPPER**

TABLE4.1.7 TABLE SHOWING THAT ALTERNATE PRODUCT INSTEAD OF COPPER					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Aluminum	23	17.7	17.69	17.7
	Stainless Steel	66	50.8	50.77	68.5
	Bronze & Brass	35	26.9	26.92	95.4
	Plastic & Ceramic	6	4.6	4.62	100.0
	<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** This study shows that, if people are not interested in using copper utensil then approximately 51% that is half the peoples are go with stainless steel, 27% of the people’s choice is bronze and bras, 18% of the people are interested in aluminum products and rest are plastic and ceramics. This is obvious that, stainless steel is the one of the best competitors for copper utensils.

TABLE 4.1.8 TABLE SHOWING THAT WHY PEOPLE ARE AVOIDING USAGE OF COPPER UTENSIL					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Copper Allergy	14	10.8	10.77	10.8
	Cost	46	35.4	35.36	46.2
	Hard maintenance	49	37.7	37.69	83.8
	Lack of Awareness	21	16.2	16.15	100.0
	<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

**Interpretation:** From the above information it is clear that, people are not using copper utensils up to 73% due to hard maintenance and its cost, 16% of the people are not aware about the health benefits of copper utensil so they do not prefer and only 11% people are suffered from copper allergy, so they are avoiding the usage of copper utensils.

**TABLE NO. 4.1.9 TABLE SHOWING THE AMOUNT SPENT ON COPPER UTENSILS**

TABLE NO. 4.1.9 TABLE SHOWING THE AMOUNT SPENT ON COPPER UTENSILS					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500-1000	45	34.6	34.6	34.6
	1000-2000	54	41.5	41.5	76.2
	2000-3000	20	15.4	15.4	91.5
	5000 and Above	11	8.5	8.5	100.0
	<b>Total</b>	<b>130</b>	<b>100.0</b>	<b>100.0</b>	

Source: primary data



**Interpretation:**The above table shows that 34.6% of the respondents spend Rs. 500-1000 on copper utensils, 41.5% of the respondents spend Rs. 1000-2000 on copper utensils, 15.4% of the respondents spend Rs.2000-3000 on copper utensils and 8.5% of the respondents spend Rs.5000 and above on copper utensils.

**TABLE NO. 4.1.10 TABLE SHOWING THE LEVEL OF ACCEPTANCE ON THE STATEMENT THAT COPPER UTENSILS HAVE HEALTH BENEFITS**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	42	32.3	32.3	32.3
	Agree	17	13.1	13.1	45.4
	Neutral	28	21.5	21.5	66.9
	Disagree	15	11.5	11.5	78.5
	Strongly disagree	28	21.5	21.5	100.0
	Total	130	100.0	100.0	

Source: primary data

**Interpretation:**The above table shows that 32.3% of the respondents Strongly Agree that the copper utensils provide health benefits, 13.1% agree the statement, 21.5% of the respondents are neutral, 11.5% of the respondents refuse to agree and 21.5% of the respondents Strongly disagree that the copper utensils have health benefits.

**TABLE NO. 4.1.11 TABLE SHOWING THE PREFERENCE ON TYPE OF COPPER UTENSILS AT HOME**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Water storing utensils	61	46.9	46.9	46.9
	Cooking utensils	24	18.5	18.5	65.4
	Decorative utensils	15	11.5	11.5	76.9
	Others	19	14.6	14.6	91.5
	pooja	11	8.5	8.5	100.0
	Total	130	100.0	100.0	

Source: primary data

**Interpretation:**The above table shows that 46.9% of the respondents [prefer copper utensils to store water, 18.5% of the respondents prefer cooking utensils made of copper, 12% of the respondents prefer decorative copper utensils and 9.6% of the respondents prefer other varieties of copper utensils.

**TABLE NO. 4.1.12 TABLE SHOWING THE AWARENESS ON COPPER ALLERGY**

Have ever come copper allergy					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	20.8	20.8	20.8
	No	103	79.2	79.2	100.0
	Total	130	100.0	100.0	

Source: Primary Data



**Interpretation:** The above table shows that 20.8% of the respondents are aware about copper allergy and 79.2% of the respondents are not aware about copper allergy.

**TABLE 4.2.1 TABLE SHOWING THAT CORRELATIONS BETWEEN GENDER AND COPPER ALLERGY**

		Copper Allergy	GENDER
Copper Allergy	Pearson Correlation	1	.323**
	Sig. (2-tailed)		.000
	N	130	130
GENDER	Pearson Correlation	.323**	1
	Sig. (2-tailed)	.000	
	N	130	130

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Interpretation:** The Karl Pearson coefficient of correlation for gender and copper allergy is 0.323. From this we can infer that the relationship between copper allergy and gender are positive and correlation is significant. So, we conclude that, copper allergy is very much affected by gender of the people

**TABLE 4.2.2 TABLE SHOWING THAT CORRELATIONS BETWEEN AWARENESS ABOUT THE BENEFITS OF CU AND AGE**

		AGE	Awareness on CU
AGE	Pearson Correlation	1	-.210*
	Sig. (2-tailed)		.016
	N	130	130
Q16	Pearson Correlation	-.210*	1
	Sig. (2-tailed)	.016	
	N	130	130

\*. Correlation is significant at the 0.05 level (2-tailed).

**Interpretation:** The Karl Pearson coefficient of correlation for gender and copper allergy is -0.210. From this we can infer that the relationship between awareness about the benefits of copper utensil and Age of the people is negative. So, we conclude that, awareness about the benefits of copper utensil is not affected by different age group peoples.

**Correlations**

**Table Showing That correlations Between Gender and Copper Allergy**

		Copper Allergy	GENDER
Copper Allergy	Pearson Correlation	1	.323**
	Sig. (2-tailed)		.000
	N	130	130
GENDER	Pearson Correlation	.323**	1
	Sig. (2-tailed)	.000	
	N	130	130

\*\* . Correlation is significant at the 0.01 level (2-tailed).



**Interpretation:** The Karl Pearson coefficient of correlation for gender and copper allergy is 0.323. From this we can infer that the relationship between copper allergy and gender are positive and correlation is significant. So, we conclude that, copper allergy is very much affected by gender of the people.

TABLE SHOWING THAT CORRELATIONS BETWEEN AWARENESS ABOUT THE BENEFITS OF CU AND AGE			
		AGE	Awareness on CU
AGE	Pearson Correlation	1	-.210*
	Sig. (2-tailed)		.016
	N	130	130
	Pearson Correlation	-.210*	1
	Sig. (2-tailed)	.016	
	N	130	130

\*. Correlation is significant at the 0.05 level (2-tailed).

**Interpretation:** The Karl Pearson coefficient of correlation for gender and copper allergy is -0.210. From this we can infer that the relationship between awareness about the benefits of copper utensil and Age of the people is negative. So, we conclude that, awareness about the benefits of copper utensil is not affected by different age group peoples.

**Findings**

**Percentage**

- I found that around 35% of the people aware about the copper utensil through social media, 26% of the people who aware copper utensil through thought word from mouth and rest are came to known through doctors and neighbours.
- I found that approximately 88% of the people who are giving preference to use copper utensil for they are regular use. Only 12% people are not interested in copper utensil.
- I found that around 75% of the people who are satisfied with the price of copper utensil in which 18% of the people are very much satisfied with the price of copper utensil.
- I found that peoples are very much conscious about health, since 62% of the peoples are buying copper utensils because of health benefits. 14% of the people are using copper utensil because their tradition.
- I found that, approximately 78% of the peoples are satisfied with the available copper model in the market. 22% of the peoples expecting new models of copper utensil.
- I found that approximately 51% that is half the peoples are go with stainless steel as a alternative product.
- It is clear shows that, people are not using copper utensils up to 73% due to hard maintenance.
- Majority (41.5%) of the respondents spend Rs.1000-2000 on copper utensils.
- Majority (32.3%) of the respondents strongly agrees that the copper utensils provide Health benefits.
- Majority (46.9%) of the respondents prefer copper utensils for the purpose of storing water.
- Majority (79.2%) of the respondents are not aware about copper allergy.

**Correlation**

- Study helps to find the relationship between copper allergy and gender are positive and correlation is significant. So, we conclude that, copper allergy is very much affected by gender of the people.
- I have found and infer that the relationship between awareness about the benefits of copper utensil and Age of the people is negative. So, we conclude that, awareness about the benefits of copper utensil is not affected by different age group peoples.



### **Suggestion**

- Clean the copper with soap and water before polishing
- Polish regularly with lemon juice and baking soda
- Avoid the dishwasher and steer clear of abrasive product
- Never heat a dry copper pan
- Consider skipping the polish and embracing patina
- Keep your heat moderate let the pan do the rest of the work

### **Conclusion**

From the above research I have found that majority of responds are preferring copper utensil in their home (88%) and the reason behind the people to prefer copper its health benefits like low body temperature and recovery from thyroid issues and people are satisfied the price of the copper this show that copper is economically preferable and it satisfied the health benefits of customer. The about study also shows that 80% have never come across the copper allergy and show that the term copper allergy doesn't affect the growth of the copper utensil in market. This study shows that there is a potential growth for copper utensils. But only problem in copper utensil is people feel hard to maintain it.

### **Bibliography**

- <https://www.indianartvilla.in/>
- <https://www.divinecopper.com/>
- <https://www.medlife.com/>
- <https://www.drcopper.in/>
- <https://www.sterlitecopper.com/>
- <https://www.architecturaldigest.com/>
- <https://copperalliance.org/>
- <https://timesofindia.indiatimes.com/>
- <http://blog.theecostore.in/>
- <https://sustainablecopper.org/>
- <https://economictimes.indiatimes.com/>
- <https://www.atsdr.cdc.gov/>
- <https://www.copper.org/>
- <https://www.medicalnewstoday.com/>