

## AESTHETIC BREAST PERCEPTION AMONG TURKISH POPULATION

### TÜRK TOPLUMUNDAKİ ESTETİK MEME ALGISI

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#### ABSTRACT

**Introduction:** Breast tissue has different composition, density, projection, position and shape among population. In literature, there are many studies that discuss the aesthetic shape or the anthropometry of breast tissue. But there is not much study which tries to find out the aesthetic perception of population. In this study we would like to find out Turkish people's aesthetic perception of the breast.

**Materials and Methods:** This study was performed through a web site 'www.breastsurvey.net'. Nine demographic questions were asked to the participants (age, gender, education, monthly income, profession, marital status, number of children, city and country). Then the participants were asked to choose one from the 20 draw-arts, which range from AA to D cup size (AA, A, B, C, D) and from 38 to 44mm (38-40-42-44) areola. Breast sizes are calculated and drawn according to the EN13402 European Union Standard.

**Results:** Four hundred and thirty seven people participated in our survey. Two hundred and four of them were male and 233 of them were female. D cup size was mostly preferred with a percentage of 70% among males. Similarly, D cup size was mostly preferred among female participants with a percentage of 40%. D cup size's popularity did not change in other subgroups (such as age, gender, education, monthly income, profession, marital status, number of children, city), either.

**Conclusion:** If the breast shape is 'aesthetically perfect', bigger cup sizes (like 'D') are preferred in Turkish population regardless of socio-economic status. In other words, the bigger is the better, in case it is beautiful.

**Keywords:** Aesthetic Breast, Aesthetic Breast Perception, Body Image, Turkish Population

#### ÖZET

**Giriş:** Toplumda meme dokusu şekil, yoğunluk, projeksiyon, pozisyon ve kompozisyon açısından bireyler arasında farklılık gösterir. Literatürde memenin estetik şekli ve antropometrisi üzerine birçok çalışma bulunmaktadır. Ancak toplumun estetik meme algısı üzerine literatürde çalışma oldukça azdır. Bu çalışmada Türk toplumunun estetik meme algısını anlamayı amaçladık.

**Gereç ve Yöntem:** Bu çalışma www.breastsurvey.net isimli internet sitesi üzerinden yapılmıştır. Katılımcılara 9 adet demografik soru sorulmuştur (yaş, cinsiyet, eğitim, aylık gelir, meslek, medeni durum, çocuk sayısı, şehir ve ülke). Takiben katılımcılardan 20 adet çizim arasından (AA cup ölçüsünden D cup ölçüsüne ve 38 mm'den 44 mm areola ölçüsüne sahip memeler) birisinin seçilmesi istendi. Memeler EN13402 Avrupa birliği standartlarına göre hesaplanıp çizildi.

**Bulgular:** Çalışmamıza 204'ü erkek 233'ü kadın toplam 437 kişi katıldı. D cup ölçüsü erkekler arasında %70 oranla en çok tercih edilen ölçü oldu. Benzer şekilde D cup ölçüsü kadınlar arasında da %40'lık bir oranla en çok tercih edilen ölçü oldu. D cup ölçüsünün popülerliği alt gruplar arasında da (yaş, cinsiyet, eğitim, aylık gelir, meslek, medeni durum, çocuk sayısı, şehir gibi) değişmedi.

**Sonuç:** Eğer meme şekli estetik olarak mükemmel ise, sosyoekonomik durumdan bağımsız olarak Türk toplumunda büyük cup ölçülerinin (D cup ölçüsü gibi) daha çok tercih edildiği görüldü. Diğer bir deyişle, 'büyük olan daha iyidir ancak güzel olduğu takdirde'.

**Anahtar sözcükler:** Estetik Meme, Estetik Meme Algısı, Vücut imajı, Türk Toplumuna

#### INTRODUCTION

Female breast, being the most prominent of the female secondary sex characteristics has a unique role in human sexual behavior. It is also important to note that the shape of breast is affected by anatomic variations in width, length, volume, density, composition and

its location relative to chest wall. Besides the anatomy, weight gain, obesity and hormonal changes such as menstruation, adolescence, pregnancy and lactation can have significant contribution to the appearance of female breast. With respect to the disappointment secondary to the change in their shape within time and

the importance of breasts as sex characteristics many women are demanding breast surgery throughout their life to have the "ideal" breasts.

Previously in many studies, plastic surgeons attempted to define certain objective measurements to determine the appearance of ideal breast. In 1955, Penn investigated 20 volunteer females to define certain standards whom he considered as being aesthetically perfect.<sup>1</sup> Even though it reflects his subjective assessment, Penn's anthropometric measurements are currently still in use in the clinical practice. On the contrary, in 1985 Smith et al studied 55 randomized female volunteers to define the average anthropometric measurements of the population without taking aesthetic perception into consideration.<sup>2</sup> In many studies ideal anthropometric measures are investigated, whereas subjective assessment from the perspective of plastic surgeons is the major conflict. In order to discard any probable bias of the surgeon and to achieve patient satisfaction, objective assessment with the perceptions of the population from as many socioeconomic groups as possible should be taken in to consideration.

In this present study, male and female subjects from the normal population were recruited for breast photographs and measurements. The main purpose of our study was to determine the relation of cup size and areola diameter on aesthetic perception and define the overall aesthetic breast perception of different socioeconomic groups among Turkish population.

## MATERIALS AND METHODS

This study was held on a web site 'www.breastsurvey.net' between March 2013 and March 2014. First, participants were required to reply nine questions about their demographic data (country, city, gender, age, marital status, monthly income, education, number of child, profession). Then they were asked to choose one out of 20 drawings, which they most liked. A cookie control mechanism was used in order to prevent double vote. The drawings represent AA-A-B-C-D cup sizes and 38-40-42-44 mm areola diameters (Figure 1-2). They were standardized according to EN13402 European Community codes. Statistics were made with chi-square test.

## RESULTS

Four hundred and thirty seven people participated in our survey, 204 of whom were male and 233 of whom were female. Males most likely preferred D cup size with a percentage of 70% (Figure 3). Although females mostly preferred D cup size similar to the preferences of males (40%), there was statistically significant difference between these two groups (Figure 4) ( $p < 0.01$ ). Most preferred areola diameter was 38 mm. in both groups and there was no statistically significant difference between them (Figure 5-6) ( $p > 0.05$ ).

There was no statistically significant correlation between cup-size and geographical region, education, marital status, number of children and age ( $p > 0.05$ ). Additionally, there was no statistically significant correlation between areola-size and geographical region, income, marital status, number of children and age ( $p > 0.05$ ), either.

There was statistically significant correlation between cup-size and one sub-group of income ( $p < 0.05$ ). (People who earned 2000-4000 euro/month mostly like D cup size) But this was not judged as clinically significant. Similarly, there was statistically significant correlation between areola-size and one sub-group of education ( $p < 0.05$ ). (People who graduated from university mostly like 38 mm cup size) But this was not judged as clinically significant, either.

## DISCUSSION

For hundreds of years, we, the Plastic Surgeons have tried to find out the 'Aesthetic Breast'. For this purpose, many proportions and measurements have been described especially in the last century.<sup>1-6</sup> In 1955, Penn used 20 female volunteers, whom he considered aesthetically perfect, basing his ideal values on a singular opinion<sup>(1)</sup> and in 1986, Smith used 55 normal female volunteers without any aesthetic judgment.<sup>2</sup> Westreich studied 50 female with ideal breast. His selection criteria was absence of ptosis and no requirement for surgery.<sup>4</sup> Brown has focused on 'normality' in breast shape instead of ideal breast in 60 female.<sup>7</sup> Vandeput and Nelissen performed anthropometric measurements on 973 women whose breasts were 'aesthetically near perfect'.<sup>8</sup> In 2010, Avşar et al. studied on 385 female whose ages were between 18 and 26 in order to find out anthropometric measurements of Turkish population. Liu et al. tried to find out the ideal breast by using the photographs of 109 volunteers. These photographs were evaluated by 252 plastic surgeons, 15 aesthetic surgery patients and 25 reconstructive surgery patients.<sup>9</sup> Recently, Malucci et al. have published aesthetic proportions of the ideal breast according to 100 topless model (whose breasts are accepted as aesthetically perfect).<sup>6</sup> As the conclusion of these studies, today, it is clear that non-ptotic and symmetric breasts are attractive. However, almost all of these studies ignore the opinion of the patients about aesthetic breast. In this study, we would like to find out aesthetic perception of Turkish population in terms of breast and areola size.

According to our findings, it was not surprising to see that males preferred D cup size (70%)(Figure 3). On the other hand, women's preference (mostly on D cup size) (40%) was surprising (Figure 4). Women preferred B and C cup sizes with the percentages of 25 and 22 respectively. Although there was a statistically significant difference between males and females, clinically almost half of the females preferred 'big' cup size. There could be only one explanation of this situation. Women,

## ESTETİK MEME ALGI ANKETİ

### AESTHETIC BREAST PERCEPTION SURVEY

Bu anket tamamen tıbbi ve bilimsel amaçlarla düzenlenmektedir. Lütfen aşağıdaki 8 adet soruya cevap verdikten sonra en çok beğendiğiniz bir çizimi seçiniz.

This survey is prepared for scientific and medical purposes. Please select a drawing which you most like, after answering eight questions.

Ülke / Country:	Türkiye
Şehir / City:	Şehir Seçiniz / Select City :
Cinsiyet / Sex:	Lütfen Cinsiyetinizi Seçiniz / Please select your gender :
Yaş / Age:	Lütfen Yaşınızı Seçin / Select your age :
Eğitim Durumu / Education:	Eğitim Durumunuza Seçiniz / Select Education :
Aylık Gelir Durumu / Monthly Income	Gelir Durumunuza Seçiniz / Select Monthly Income :
Meslek / Profession:	Mesleğinizi Seçiniz / Select Your Profession :
Medeni Durum / Marital Status:	Medeni Durum Seçin / Select Your Marital Status :
Çocuk Sayısı / Number of Children:	Çocuk Sayınızı Seçin / Select your number of Children :

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Figure 1. Web page of the study including demographic questions and drawings

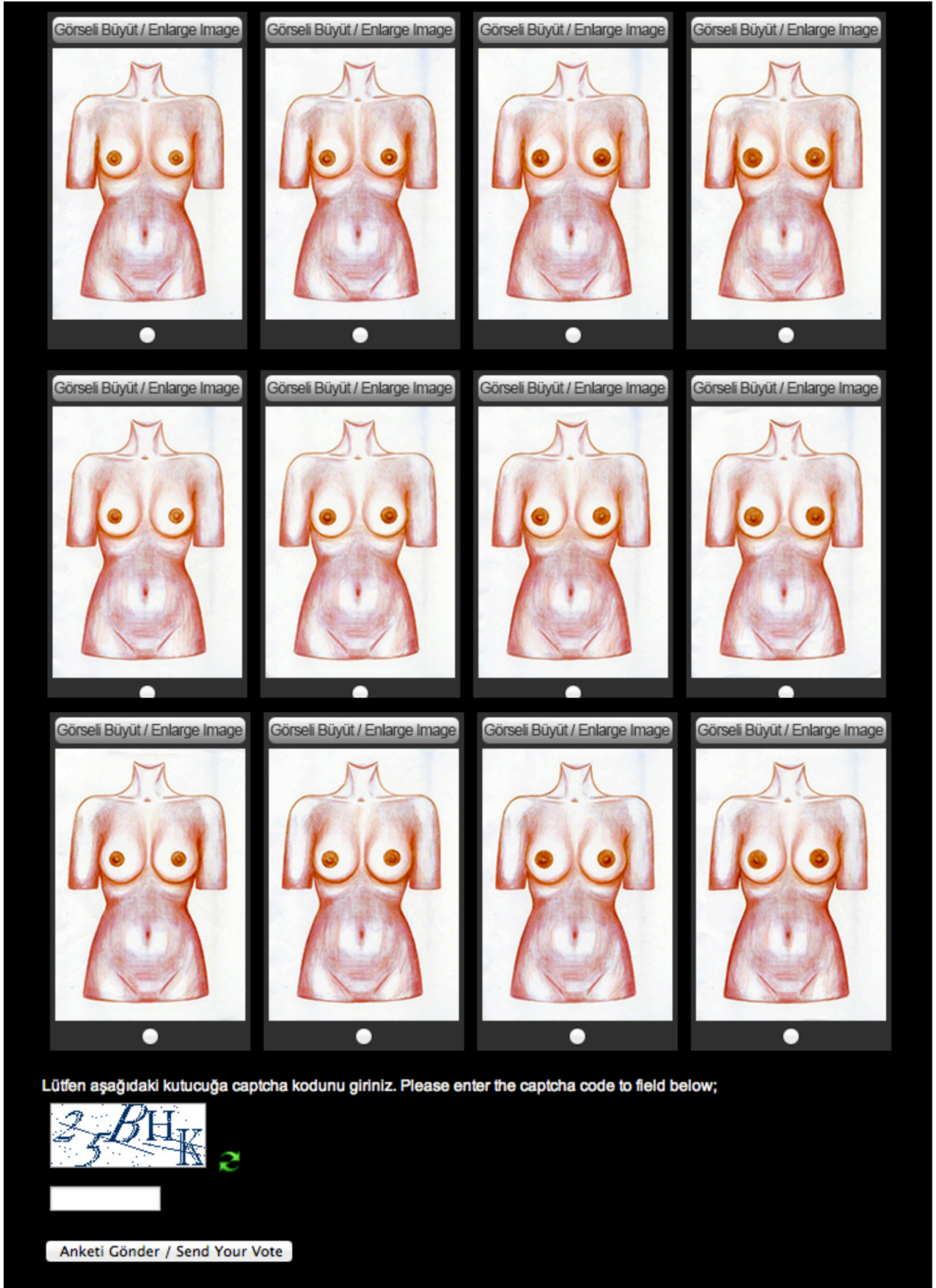


Figure 2. Web page of the study including drawings (continue of the first figure)

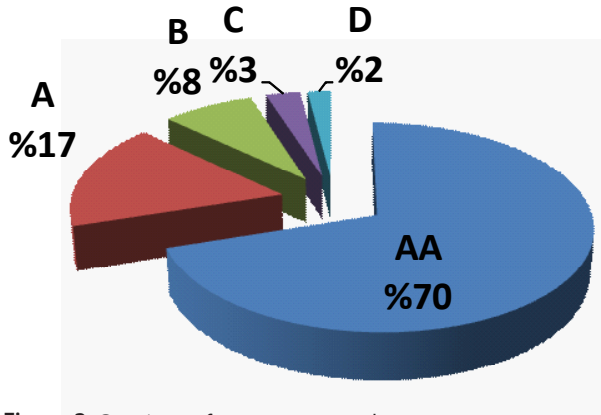


Figure 3. Cup size preference among males

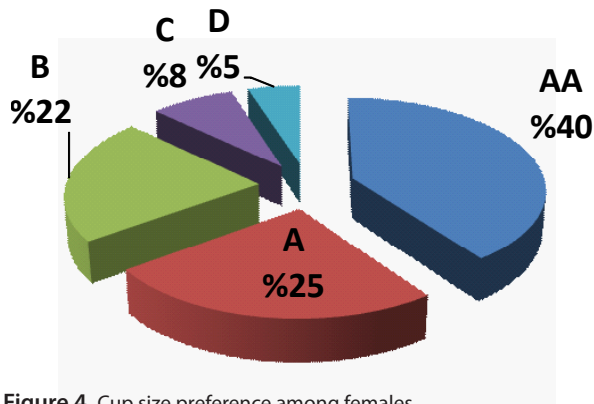


Figure 4. Cup size preference among females

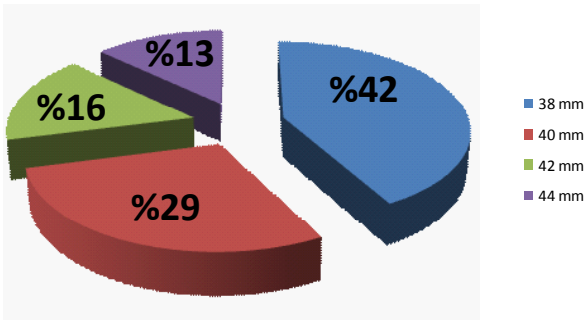


Figure 5. Areola diameter (mm) preferences among males

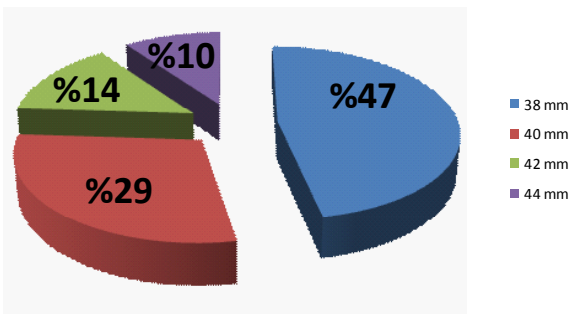


Figure 6. Areola diameter (mm) preferences among females

as well as men, find bigger breasts attractive if they are perfect like a drawing. In our survey, all breasts were drawn according to ideal aesthetic measurements that had been published before.<sup>3-6,9</sup>

Our study revealed that, approximately 70% of males and females preferred 38 and 40 mm areola (Figure 5-6). So we can say that our population likes smaller diameter areolas.

It was interesting to find out no statistically significant correlation between preferences and geographical region, city, age, marital status, monthly income, education, number of child and profession. Frankly, we expected some statistically significant correlation with geographical regions and education groups. But the study showed that aesthetic perception is free from these factors.

## CONCLUSION

If the breast shape is 'aesthetically perfect', bigger cup sizes (like 'D') are preferred in Turkish population regardless of socio-economic status. In other words, the bigger is the better, in case it is beautiful.

*This study was presented in 35<sup>th</sup> National Meeting of Turkish Plastic Reconstructive and Aesthetic Surgery Society and 2014 American Society of Aesthetic Surgeons Meeting, San Francisco, CA.-USA*

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