

## **Facial Anthropometry in an Arab Population**

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**Objective:** To measure the inter-alar width of the nose, the maxillary inter-canine distance and mouth width of an Arab sample and evaluate the ethnic variations.

**Design:** A prospective study.

**Setting:** College of Medicine and Medical Sciences, Arabian Gulf University, Bahrain.

**Method:** One hundred sixty-eight young adult Arab subjects (51 males and 117 females), from five countries of the Gulf Cooperation Council (GCC), were selected randomly from undergraduate medical students during the academic year 2009/2010. Mouth, nose and teeth dimensions were measured using Vernier caliper; for each subject, three measurements were taken and the average was recorded.

**Result:** The mean inter-alar width of the nose was 35.06 mm (37.14 mm in males and 33.21 mm in females). The mean maxillary inter-canine distance was 37.96 mm (39.66 mm in males and 36.38 mm in females). The mean mouth width was 50.66 mm (52.85 mm in males and 48.63 mm in females). The maxillary inter-canine distance was 75% of mouth width; therefore, the mouth width is a reliable predictor of the maxillary inter-canine distance and vice versa in the Arab population. Comparison between nationals from different GCC countries showed that Bahraini males had significantly wider mouths than Saudi Arabian males ( $P=0.034$ ).

**Conclusion:** GCC Arab males had significantly wider noses, broader maxillary arches and wider mouths than females ( $P<0.001$ ). Anterior maxillary arches were found to be wide in males and females, which seems to be an ethnic characteristic in Arabs of this region.