

## THE FRAMEWORK OF YOUR FACE

Just as bones give shape to your whole body, bones also form the "framework" of your face. The size and position of facial bones and the teeth in them determine how well you bite and how you look. If any of these bones are shaped incorrectly, problems in your jaws, teeth, or appearance can result.

### Facial Anatomy

The bones in a healthy jaw are a "matched set." If they come together evenly when you chew, you have a normal bite. If the relationship between your forehead, nose, lips, and chin is a pleasing one, you have a proportional appearance.

**Your upper jaw bone, or maxilla,** holds your upper teeth and supports your upper lip and the base of your nose.

**The temporomandibular joint (TMJ)** moves up, down, forward, backward, and side to side, so you can talk, chew, sing, and yawn.

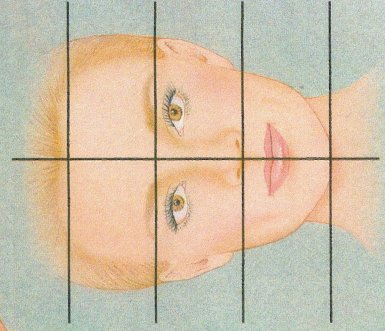
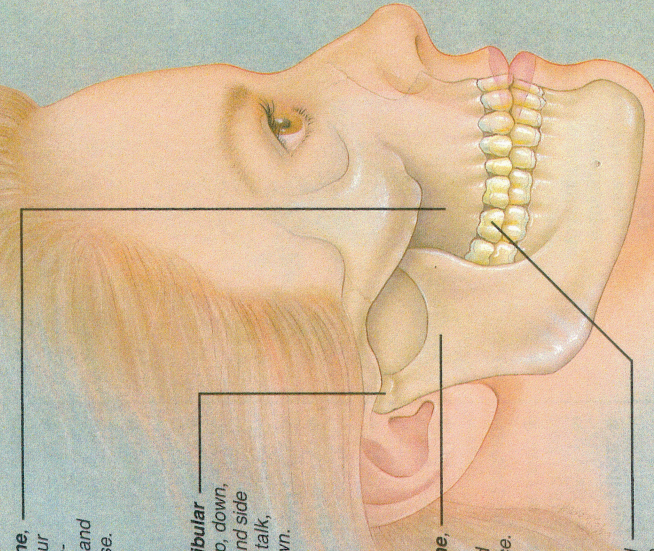
**Your lower jaw bone, or mandible,** holds your lower teeth and forms your lower face. It's the only moving bone in your face.

**Your teeth,** covered with hard enamel so you can chew food, are secured in your bones with strong fibers.

**You have a proportional profile** if the position of your forehead, nose, lips, and chin complements your overall appearance. The size and shape of your facial bones and the skin that covers them determine your profile.

**You have a normal bite** if all of your upper teeth and lower teeth are aligned correctly and bite together evenly. Your front upper teeth should overlap your front lower teeth slightly.

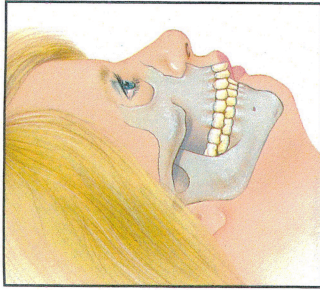
**A well-proportioned face** is divided into equal thirds from the hairline to the eyebrows, the eyebrows to the base of the nose, and the base of the nose to the chin. If your face is divided down the middle, each side should closely resemble the other.



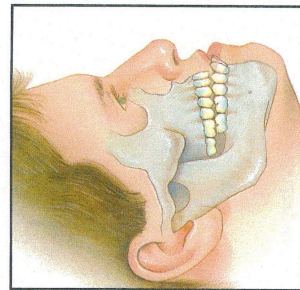
### A Facial Imbalance

If your jaws and face are out of proportion, you may have problems chewing or speaking certain sounds clearly. You may even be uncomfortable with your appearance. Incorrectly shaped bones are usually caused by uneven development of your jaws early in the growth years or may be caused by an injury to the face. You may have one or a combination of these facial imbalances.

#### Lower jaw

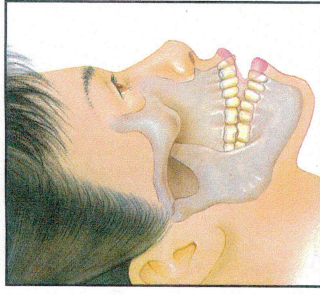


A **small lower jaw** (underdeveloped lower jaw) may cause bite problems, such as not being able to bite into food. Or, it may cause your chin to look recessed. Your upper teeth may jut out in front of or overlap your lower teeth.



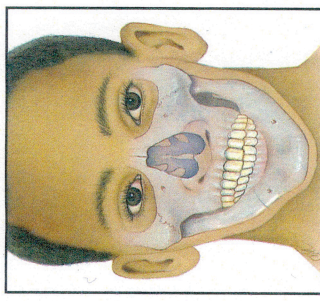
If you have a **big lower jaw** (overdeveloped lower jaw), chewing may be difficult, and your chin may appear too far forward. Your lower teeth may jut out in front of or overlap your upper teeth.

#### Upper jaw



If you have a **long upper jaw** (overdeveloped upper jaw), you may have a "gummy smile" or some of your teeth may not meet, making chewing difficult. If you have a **small upper jaw** (underdeveloped upper jaw), your upper lip may look sunken in and your upper teeth may look recessed. You may have difficulty biting into food. You have an **open bite** if most or all of your teeth don't meet, making it difficult to bite or chew food. You may not be able to close your lips without straining.

#### Uneven jaws



If your jaws are overdeveloped on one side or underdeveloped on the other, you have an **uneven jaw** or **facial asymmetry**. Your face may appear "off center." Your upper or lower teeth may have shifted over to one side, which can make biting and chewing awkward. The bones around your eyes may also be shaped incorrectly.



**Oral and Maxillofacial Surgery  
Cephalometric Analysis**

Name \_\_\_\_\_  
Age \_\_\_\_\_ Sex \_\_\_\_\_ Date \_\_\_\_\_

Relationship	Measurement	Mean	S.D.	Pre	Post	Fin
Skeletal	A-P position	SNA	82	3		
		FH-NA	90	3		
		SNB	80	4		
		ANB	2	2		
	Vert. position	Wits	0mm			
		Max. Ant.	30mm	2		
		Max. Post.	26mm	2		
	Max. length	Mand. Ant.	44mm	M	2	
			40mm	F	2	
	Mand. length	PNS-ANS	65mm	M	3	
		61mm	F	4		
Angles	Go-Gn		86mm	4		
			81mm	4		
	SN-GoGn		32	4		
			25	4		
		Go angle	125			
		SN-occl plane	14			
	SN-palatal		7			
	Dento-Alveolar	Max Inc-SN	104			
		Max Inc-NA	22			
Max Inc-pal pl		112	6			
Mand Inc-GoGn		93				
Interincisal angle		131				
Facial Contour	A-P position	NA-APg	0			
		FH-NPg	88	4		
		FH-SnPg (s)	90			
		FH-Pg (s)N(s)	90			
	Vert. position	N-ANS	50mm	43%	3	
		ANS-Gn	65mm	57%	5	
		N-Gn	115mm		6	
		G-Sn/G-Me(s)	50%			
	Lip drape	Sn-Me (s)/G-Me(s)	50%			
		Max lip	22mm	M	2	
		20mm	F	2		
Angles	Inter lip	2mm		1		
	Max Inc-lip	2mm		2		
	NL angle	105				
	Neck/chin angle	110				
	Pg(s)-apex NCA	50mm				

Diagnosis:

Proposed Treatment:

Treatment and Surgical Date: