

THE  
DJC SMILE  
TEXTBOOK



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ORTHODONTICS

A look into types of bites  
and the appliances we use  
in our office to correct  
them!

# CLASS 1 OCCLUSION



**A class 1 occlusion is when the upper first molar aligns with the grooves of the lower first molar, creating a normal relationship between the teeth of the lower and upper jaw.**



# CLASS 2 OCCLUSION



**When the upper First molar is posterior (more towards the back of the mouth) than the Lower first molar, creating an off balance relationship between the teeth of the upper and lower jaw**

See the teeth  
don't fit  
together in  
zipper  
pattern



creates  
overjet here

# CLASS 3 OCCLUSION



**When the lower first molars are too far forward in relationship to the upper first molar, creating a severe underbite. Creating a severe of balance relationship between the teeth of the upper and lower jaws. (Also known as underbite, see on next page)**

**lower molars forward**



**underbite**



**corrected**



# UNDERBITE



**When the lower teeth protrude further out than the upper teeth, creating a misalignment or class 3 occlusion!**

**Before  
lower  
teeth  
forward**



**← After  
correction**

# CROSSBITE



**A misalignment of teeth where the upper teeth fit inside of the lower teeth. This can affect just one tooth or a whole group of teeth in the front or back!**

**There are 2 types of crossbite:**

**Posterior : when the back teeth are affected -> upper teeth sit inside of bottom teeth.**

**Anterior : when the front teeth are affected -> upper teeth sit behind the bottom teeth. (Not the same as underbite)**



**Posterior crossbite**



**Anterior crossbite**



# OPEN BITE



**A malocclusion in which teeth do not contact each other.**

**Posterior : the back teeth do not touch**

**Anterior : the front teeth do not touch**

**Before**



**After**



# APPLIANCES

**Any device, attached or removeable, that is designed to move the teeth, change the position of the jaw, or hold the teeth in their finished positions**

**Fixed appliance : an orthodontic appliance that is bonded to the teeth and cannot or should not be removed by the patient**

**Removable appliance : an orthodontic appliance that is removable by the patient**

**Functional appliance : a type of orthodontic appliance that uses jaw movement and muscle action to place selective force on the teeth and jaw. Can be removeable**

**Auxiliary appliance : an orthodontic appliance that can be attached to a fixed appliance**



# BRACES

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**Fixed orthodontic appliances, comprised of brackets and wires**



**InBrace : braces that go behind the teeth -  
completely hidden**



**Lightforce : 3D printed clear braces**



# ALIGNERS



**Clear removable appliances that are used to  
move teeth**



# ATTACHMENTS



**The tooth colored “bumps” placed on teeth during clear aligner treatment. They help move the teeth while a patient wears aligners. They are removed once treatment is complete**



**attachments**



**front  
attachments  
you might not  
be able to see  
above**



# CARRIERE (MOTION APPLIANCE)



**This appliance moves the upper and lower teeth for a more aligned bite. This fixes class II or class III bites. By aligning the bite before the transition to braces or aligners, total treatment time can be greatly reduced.**



**Buttons for  
elastics**

**The bar pulls the lower  
teeth forward**



**Before**



**After**

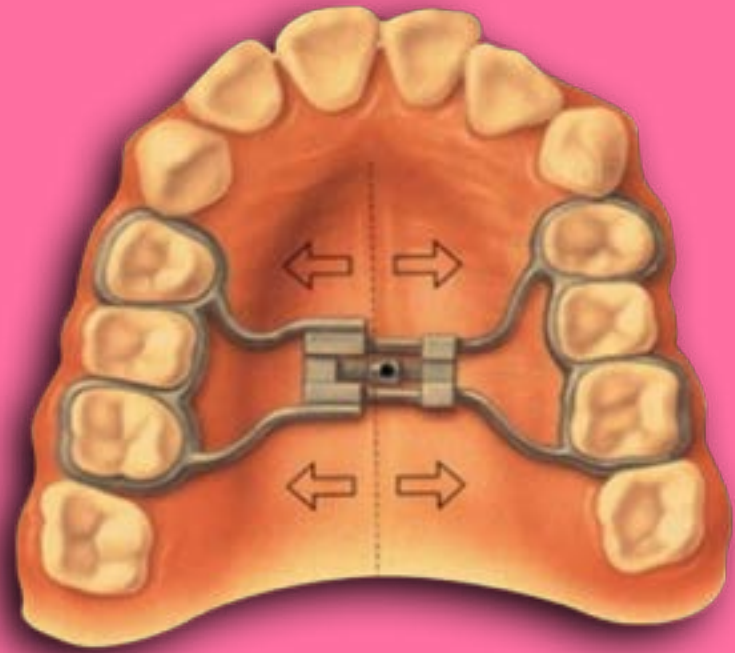
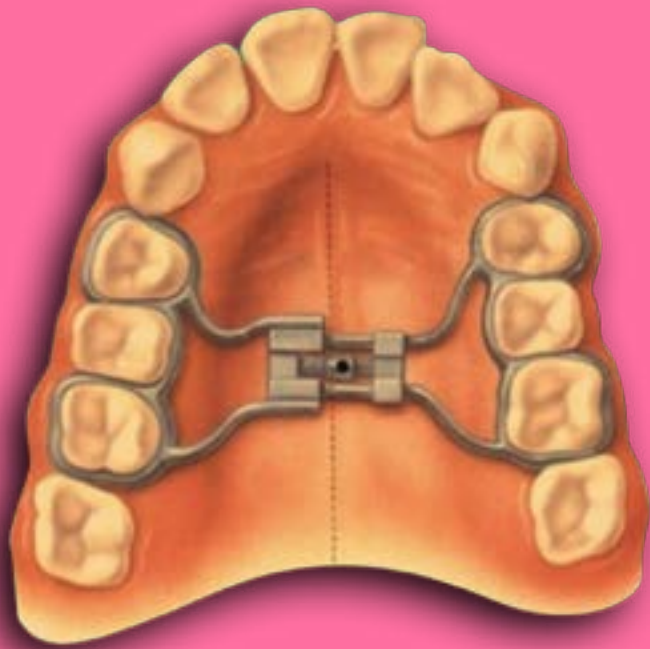


# EXPANDER



**An orthodontic appliance that can widen the  
jaws.**

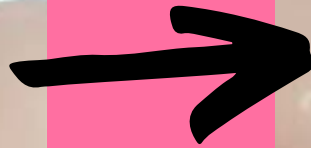
**Expanders help cross bites!**



# SEPARATORS



**An elastic O-ring placed between the teeth to create space for placement of orthodontic bands**



# HERBST APPLIANCE



**This appliance is used to move the lower jaw forward with a gentle force. It redirects and harnesses the natural growth that occurs in the lower jaw. It can be fixed and cemented to teeth on both arches using steel crowns. An expansion screw may be used to widen the upper jaw at the same time.**

# What the appliance looks like



# MARA



**MARA = Mandibular Anterior Repositioning Appliance**

**An appliance used to bring the lower jaw forward to correct  
an excessive overjet**

**This appliance is used for class II correction**



**Side view of the MARA -  
looks like a metal "arm" in  
the mouth**

**How the MARA  
appliance looks  
on one of our  
patients**





# HEADGEAR



**Orthopedic, auxiliary appliance that is worn to help guide growth of the face and jaw.**

**Cervical Headgear : Moves the upper teeth and jaw backward into proper position**

**Reverse-pull headgear/facemask : used for underbite correction and gently pulls the upper jaw forward which allows it to catch up with the lower jaw**

# Cervical Headgear



**Jaw Before**



**Jaw After**



# Reverse-Pull Headgear



**Jaw Before**



**Jaw After**



**Jaw Comparison**

# RETAINER

**A fixed or removable appliance worn after braces are taken off or aligner therapy is complete. Retainer wear is for life!**

**Hawley Retainer : a removable retainer made of wire and acrylic material**

**Essix Retainer : a removable retainer made of a clear, plastic-like material**

**Bonded Lingual : a wire bonded to the backs of the teeth to hold everything in place**

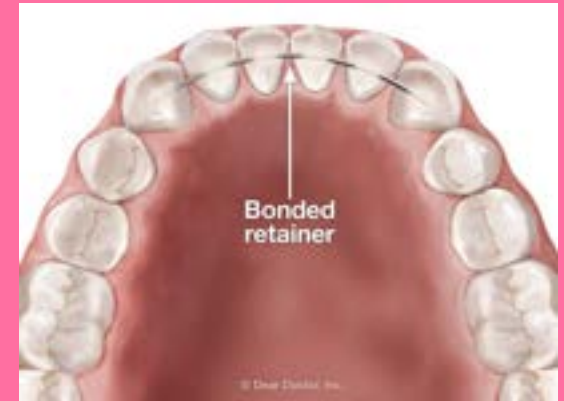
# Hawley Retainer



# Essix Retainer



# Bonded Lingual



# Bonded Wire with Pontic Teeth



**A wire bonded to the backs of the teeth with pontic  
teeth attached**





What is a  
DJC  
Smile?

WHAT IS A DR. JESSICA SMILE?

DR. JESSICA  
**COHEN**  
ORTHODONTICS

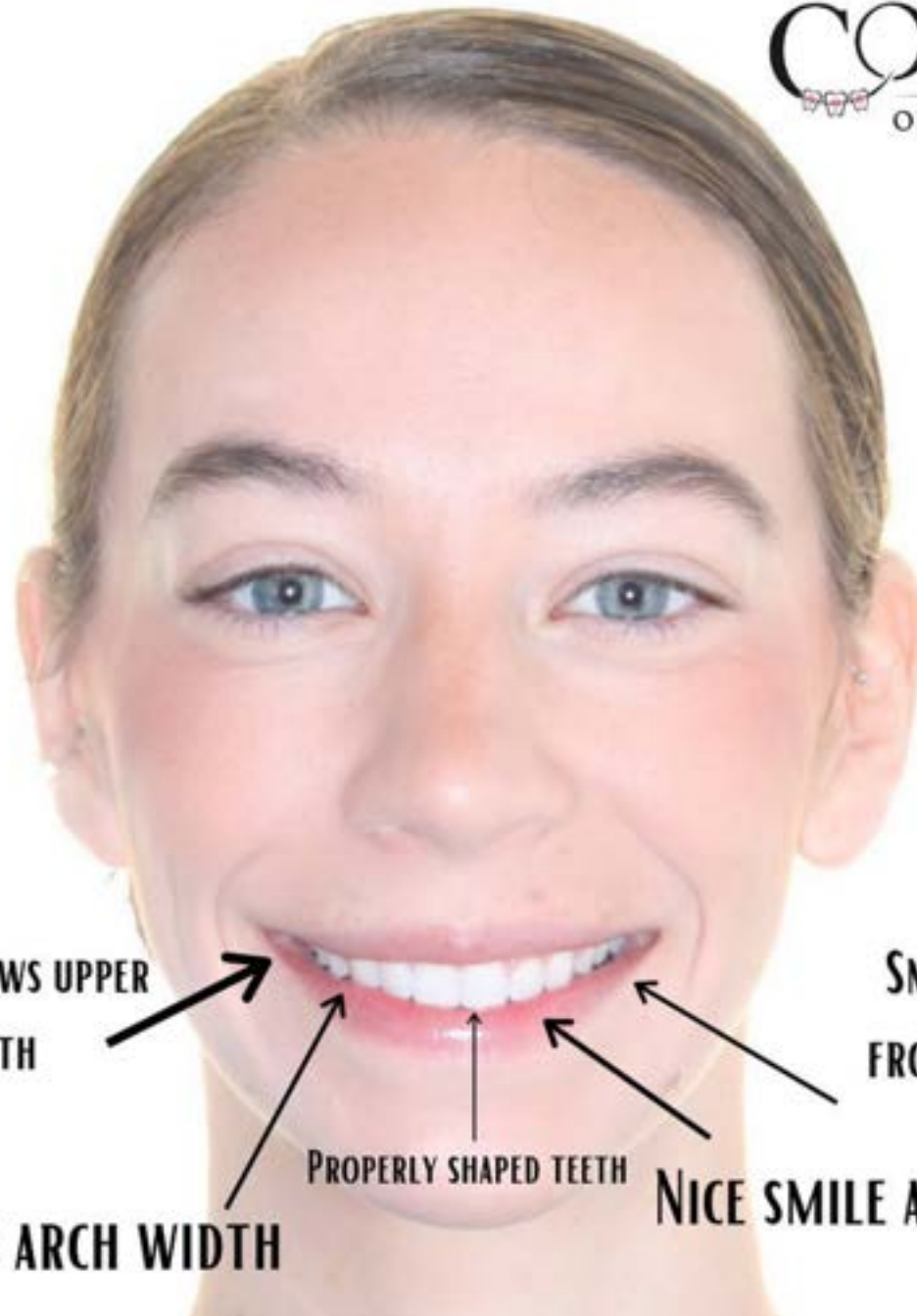
SMILE SHOWS UPPER  
TEETH

SMILE FLOWS  
FRONT TO BACK

GOOD ARCH WIDTH

PROPERLY SHAPED TEETH

NICE SMILE ARC





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