

# Digital Dentures

Dentures typically are made through a series appointments:

1. Initial exam and records, including initial impressions
2. Definitive impressions for the complete denture
3. Wax rims made on the casts from the definitive impressions to simulate the 3-dimensional location of the anticipated teeth in space. In addition, jaw relation records are made to capture the position of the maxilla (upper jaw) and interarch relationship of the maxilla to the mandible (lower jaw). At this appointment, denture teeth are selected for color, shape and size to be placed in the wax rims for try-in at the next appointment.
4. Teeth in wax and tried in and the esthetics, fit and function, as well as speaking space are evaluated. After both the patient and the dentist are happy with this, a consent for processing the denture is signed by the patient and the dentures are sent for processing and finishing.
5. Placement of the dentures is really the final appointment. Care is taken to evaluate the fit of each denture and the articulation (fit) of the teeth.
6. Post Placement Check – This is an appointment set for the following day in case any further adjustment is needed for sore spot or occlusal (bite) problem.
7. Follow-up checks – These are appointments called in by the patient after wearing the dentures if there are any sore spots or adjustments needed.
8. Recall – Yearly recalls are made for follow-up and check of the condition of the dentures, and mouth, head and neck.

Digital Dentures follow a streamlined and different, but similar workflow. One essential criterion is that *the current dentures were acceptable to the patient but need to be replaced*. If Dr. Hummert determines the dentures can be used as a template for the new set of dentures to be fabricated, then digital dentures may be an option. Or, in some cases an entirely new set can be made digitally, but with a somewhat different workflow.

1. The dentures are left with Dr. Hummert to make a digital scan of them and produce a file to print a duplicate denture. Duplicate dentures are printed and made ready for try in and reline impressions.
2. The duplicate dentures are tried in and impressions made to assure the most accurate fit. These are also used for the jaw relation records indicated above in appointment 3. These are sent to the lab where they convert these to a digital denture, and fabricated to finish, without any try in or evaluation before finishing.
3. Placement and adjustment of the dentures are made.
4. Post Placement Check – This is an appointment set for the following day in case any further adjustment is needed for sore spot or occlusal (bite) problem.
5. Follow-up checks – These are appointments called in by the patient after wearing the dentures if there are any sore spots or adjustments needed.

6. Recall – Yearly recalls are made for follow-up and check of the condition of the dentures, and mouth, head and neck.

Advantages:

1. The fit of the denture is extremely accurate and minimal adjustments are needed.
2. The denture material is made from a very dense puck that is milled to fit the digital scan of the impression. This aids in the hygiene of the patient as there are no processing imperfections, voids, etc.
3. Since the materials are milled the strength of the dentures is stronger than a processed conventional denture.
4. The digital files can be stored and duplicate dentures can be fabricated identical to the originals made and placed.

Disadvantages:

1. Primarily the cost is higher than a conventional denture.
2. There is no try-in of the teeth and the patient has to be comfortable with the esthetics of the digital duplicate esthetics before okaying the fabrication.

**If you have any questions about relines, please feel free to ask us.**