CUSTOM TRAYS 302B

WEEK 6

INTRODUCTION:
The topics covered today are:

- Steps in constructing a Custom Tray
- Wax Spacers
- Edentulous Custom Trays
- Types of Custom Trays
- Machinery which will be used & Precautions to be followed
STEPS IN CONSTRUCTING A CUSTOM TRAY

• Read SCHEDULE H for design information

• Draw design onto primary model (including any stops)

• Adapt wax as a spacer if necessary

• Trim wax to drawn design and cut out stops (if required)

• Mark the centre of the model anteriorly (on land area)

• Paint a thin coat of SODIUM ALGINATE onto the model (not on the wax)

• Adapt light cure acrylic to model evenly

• Be sure to follow design drawn

• Peripheries of the tray should not be too thin and sharp (fold over light cure material to prevent this occurring)

• Use shank of your bur and perforate material (if required)

• Attach handle using the centre line as a guide

• Place into light curing machine

• Remove from machine after one cycle, remove tray from model and re enter into curing machine fitting side up, run machine

• Remove tray and clean out wax spacer if present

• The tray should now be trimmed, remembering that it should be entirely smooth with no sharp or rough edges

• Make sure that any perforations are complete

• Disinfect custom tray
WAX SPACER

The purpose of a wax spacer is to control the amount of impression material around the morphology of the maxilla and mandible, it enables an even thickness of impression material.

When a wax spacer is placed onto a partial dentate model, it is done so for two reasons.

1. To allow the impression to have an even thickness of impression material, as explained above.
2. To allow insertion and removal of the tray by eliminating undercuts.

EDENTULOUS SPECIAL TRAYS

A spaced special tray is constructed by adapting the tray material over a wax spacer which has been adapted to the model first. The wax spacer will be replaced by impression material when the impression is taken.
TYPES OF CUSTOM TRAYS

Custom trays can be designed in many different ways for the same patient. So care should be taken when a tray is being made that the SCHEDULE H form is read. Trays may be close fitting, spaced, perforated, have stops etc.

All custom trays should be comfortable, clean, smooth, bio compatible and have an acceptable appearance.

The handle of a custom tray can also have many designs. All handles should be:

- Strong enough to withstand the removal of the tray
- Large enough to hold onto
- Positioned in a manner to replicate anterior tooth position if missing. If anterior teeth are present the handle should be level with the incisal edge.

MACHINERY WHICH WILL USED AND PRECAUTIONS TO BE FOLLOWED

Light curing machine: Used to cure the light cure material. The machine should not be opened while in operation, your eyes may suffer permanent damage.

Micro motor: A rotating hand held motor which is used to trim and adjust acrylic, this includes your custom trays. Safety glasses and P2 masks must be worn. Also no loose clothing or long hair will be permitted.

YOU MUST BE GIVEN A DEMONSTRATION BEFORE USING ANY OF THIS EQUIPMENT BY ONE OF YOUR TEACHERS, AND FOLLOW ANY OTHER SAFETY PROCEDURES AS INSTRUCTED.
OUTCOME:

You should now be able to know the following:

- The Steps in constructing a Custom Tray
- The purpose of Wax Spacers
- Edentulous Custom Trays
- Types of Custom Trays
- The Machinery which will be used & the Precautions to be followed