

### 12.1 Setup concepts

#### Generally accepted principles.

When setting up posterior teeth stability of the denture is a major goal applicable to all denture prosthetics. This should be kept in mind when addressing and overcoming the range of clinical difficulties encountered daily in denture construction.

Regardless of which concept is to be used, correctly determined centric relation is an essential and fundamental base from which to begin the work. The only possible exception may be when using teeth with zero degree cusps.

It makes no sense to try to conform to a single theoretical concept at any price without being aware of the practical consequences. This means that the suitability of a particular concept must be determined for each particular case.

Three concepts are described in the following and which can be utilized in virtually all cases.

#### 12.1.1 Lingualised occlusion

##### VITA MFT®

#### The principle of lingualised setup.

In lingualised occlusion the lingual working cusps of the upper posterior teeth occlude into the central fossae of the lower posteriors.

The buccal cusps are out of contact. The lower posteriors are setup according to the alveolar ridge and curve of spee in order to obtain denture stability. Their occlusal surfaces appear horizontally aligned from a labial perspective.

The upper and lower posteriors are brought into contact in such a way that they articulate anatomically and functionally. Note: there is always a free space left between the upper and lower buccal cusps.

VITA MFT teeth are generally setup in a tooth to tooth relationship. Should it be necessary for some reason to set the teeth in a tooth - to - two - teeth relationship this is quite acceptable.

#### Advantages of lingualised occlusion.

The aim of lingualised occlusion is to stabilise the dentures while providing maximum space for the tongue.

The occlusal forces transferred to the oral mucosa and the underlying bone substance are thereby minimised.

This generally reduces the strain on the denture bearing area and can be an essential ingredient in the survival of implant cases.



Fig. 1



Fig. 2

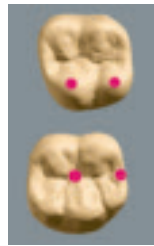
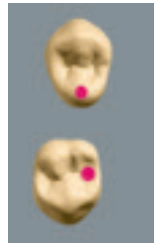


Fig. 3



### Procedure:

#### 1. Setup beginning with the first upper molar

Please note: with lingualised occlusion, the lower posteriors are setup vertically, i.e. are not lingually inclined (Fig. 1). The dominant mesio-lingual cusp of the first upper molar bites into

the fossa of the first lower molar (Fig. 2). The distolingual cusps come into contact with the distal marginal ridge of the first lower molar. The second upper premolar is then brought into contact with its antagonist. The palatal cusps of the latter should come into contact with the fossa of the second lower premolar (Fig. 3).



Fig. 4

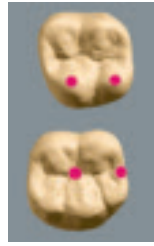


Fig. 5

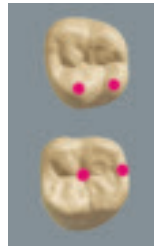


Fig. 6



The palatal cusp of the first upper premolar should now bite into the fossa area of the first lower premolar (Fig. 4). Finally, the second upper molar is setup. The palatal cusps grip into the fossa area of the second lower molar (Fig. 5).

The buccal cusps of all upper posteriors are situated slightly higher than, and out of contact with the buccal portions of their antagonists (Fig. 6).



Fig. 7



Fig. 8

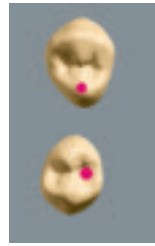
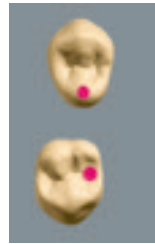


Fig. 9



2. Setup beginning with the first upper premolar. Please note that in lingualised occlusion, the lower posteriors are first setup horizontally, i.e. not lingually inclined (Fig. 7). The lingual cusp of the first upper premolar should now bite into the

fossa area of the first lower premolar (Fig. 8). The second upper premolar is then brought into contact with its antagonist. The lingual cusp of the latter should grip into the fossa of the second lower premolar only (Fig. 9).



Fig. 10

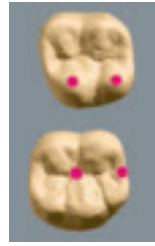


Fig. 11



Fig. 12



The dominant palatal cusp of the first upper molar bites into the fossa of the first lower molar. The distolingual cusp meets the distal marginal ridge of the first lower molar (Fig. 10). Finally the second upper molar is setup.

The lingual cusps bite into the fossa area of the second lower molar (Fig. 11). The buccal cusps of all upper posteriors are always situated slightly higher, and out of contact with the buccal portions of the antagonists (Fig. 12).