

# Guidelines for a Minimum Acceptable Protocol for the Construction of Complete Dentures

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**Purpose:** To investigate the feasibility of obtaining expert consensus on the prosthodontic principles to be followed when constructing complete dentures, so that any modifications to materials and methods would not sacrifice those principles—a philosophy known as “appropriattech.” These principles would then comprise a Minimum Acceptable Protocol (MAP) for complete dentures. **Materials and Methods:** A Delphi survey technique was used that requested yes/no answers to a variety of statements describing the different stages in the construction of complete dentures. Respondents could also provide comments on any aspect of the questionnaire. The statements were then modified in light of the responses and comments received, and recirculated. Three rounds of questionnaires were used, and only statements achieving a 90% or greater consensus were included in the MAP. The respondents were randomly selected by country from the 2004 membership e-mail list of the International College of Prosthodontists. **Results:** Forty-one respondents answered the first questionnaire, 39 the second, and 36 the third. The 75 statements in the first questionnaire were gradually reduced as consensus was reached, and eventually 18 statements remained with 90% or greater agreement. **Conclusion:** Even though expert opinion is regarded as the lowest level of evidence, there are no other methods available to derive such a protocol, and the Delphi technique was useful in obtaining the consensus. This MAP could now be used to help assess clinical techniques that attempt to reduce time and costs while producing a quality service—in other words, which will conform to the philosophy of appropriattech. *Int J Prosthodont* 2006;19:467–474.

This paper arose from the need for some consensus on the prosthodontic principles to be followed when constructing complete dentures, so that any modifications to materials and methods would not sacrifice those principles, thus conforming to the philosophy of “appropriattech”—the use of appropriate technology in the form of cost-effective materials and methods to

maintain quality and ensure conformity to acceptable prosthodontic principles.<sup>1</sup> Further, it was thought that if a method could be devised to define a Minimum Acceptable Protocol (MAP) that defines these principles, this would allow for innovative applications of appropriattech in a variety of fields.<sup>1,2</sup>

The Delphi technique is a method of obtaining consensus among a group of experts. First used and described by the RAND Corporation in the 1950s for technologic forecasting,<sup>3</sup> it is named after the Pythia, or Priestess of the Temple of Apollo, at Delphi, Greece.<sup>4</sup> It is a technique that attempts to obtain group consensus by combining the opinions of participating experts responding to a series of questionnaires. The participants remain anonymous, and the results of each round of questionnaires are fed back to the participants, who are then asked their opinion again regarding any modifications to the statements that were made as a result of the previous round. This process is repeated for 2 or 3 iterations.<sup>5,6</sup>

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The Delphi survey technique has been used in a variety of settings in health services, but has not been used in dentistry.<sup>7-12</sup> It seemed an ideal instrument to develop consensus on a MAP for complete dentures, and the International College of Prosthodontists (ICP) provided a readily identifiable worldwide panel of experts.

The literature is unclear on the degree of agreement that constitutes consensus. Early Delphi studies used a simple majority (51%), while others rejected responses with less than 70% agreement. For this study, the author arbitrarily decided to set a minimum level of agreement at 90% for inclusion into the MAP. The reasoning was that this high level of agreement was necessary, particularly in the field of complete dentures, where there is often a lack of evidence for many advocated procedures (such as the use of a particular tooth form, which has been debated in the literature for over a century).

## Materials and Methods

The website of the ICP is in the public domain, and in 2004 carried a list of the entire membership and their e-mail addresses, if available. This list of specialist prosthodontists was used to select possible participants in the study. There were 761 members from 50 countries around the world. Most countries had less than 10 members, but some had more than 100. Because it would have been too cumbersome and time consuming to contact all members, it was decided to select 1 member for every 10 members in each country. Fifteen countries had only 1 member, so that person was contacted, except for the members from Ireland, Romania, and Yugoslavia, whose e-mail addresses were not on the list. For countries with more than 1 member, a randomly generated number list was used to select the position of the member on the list; similarly, for countries with more than 10 members, a random series of numbers was generated to provide 1 position number for every 10 members. If there was no e-mail address provided for the member selected, the next member on the list was selected.

This selection process resulted in a mailing list of 97 members, who were sent an initial request for participation together with some background information about the study. Although the investigator was by necessity able to identify the respondents, their responses were coded and therefore anonymous to any analysis. Ethical clearance for the use of the questionnaire was obtained from the committee on research in human subjects of the University of the Witwatersrand, Johannesburg.

Many respondents agreed to participate after the first contact, but many e-mails were returned for a variety of reasons: the address may have been wrong, the mailboxes may have been full, or the local server had

blocked the e-mail. Several attempts were made to resend this initial request, or to obtain the correct e-mail address. After 3 to 4 mailings, 41 members had responded and agreed to be participants, representing 24 countries (Table 1). However, not all of these remained in the study to the end, with 41 completing the first questionnaire, 39 completing the second questionnaire, and 36 completing the final questionnaire.

The first questionnaire and background information were compiled by the author. The background information introduced the participants to the concept of appropriatech,<sup>1</sup> described the Delphi method, and asked for the completion of a questionnaire in the form of Yes/No responses to the statements, with the opportunity for comment. The statements were compiled by considering each stage of complete denture construction as conventionally advocated in readily available textbooks and numerous articles over the last several decades. The stages used and the number of statements per stage and per questionnaire are shown in Table 2. For each stage, participants were given the opportunity to suggest alternatives, either as part of the statements or as a separate item. In addition, at the end of each questionnaire, participants were also given the opportunity to make any additional comments.

The responses to the first questionnaire were collated and the percentages of yes/no answers calculated. In addition, all comments were entered into a database, and based on these comments, the author either removed statements with clearly no consensus or that indicated no hope of consensus, and/or reworded them to take into account the comments. A second questionnaire was then compiled and sent out, and an identical process followed to compile a third questionnaire, which summarized the areas of consensus reached in the first 2 rounds and suggested that the final statements would be suitable for the MAP. Where consensus and/or wording were still contentious, alternatives were provided. Respondents were asked to indicate their agreement or disagreement with the MAP statements, which for those who had already agreed would be an affirmation of the wording, and also to respond to the alternative statements.

After analyzing the responses to this third questionnaire, there was sufficient agreement for 18 statements to be incorporated into a MAP, with 2 issues outstanding with less than 90% agreement. The statements were grouped into 3 sections based on the stages of denture construction: the initial preparatory phase, the treatment phase, and the posttreatment phase.

## Results

Space constraints prohibit the reproduction of every statement of every questionnaire (these are available

**Table 1** Respondents to the First Questionnaire

Country	No. of respondents
Australia	2
Brazil	1
Belgium	1
Canada	4
Germany	1
Greece	3
Holland	1
India	1
Israel	1
Italy	2
Japan	2
Korea	1
Lebanon	1
New Zealand	1
Norway	1
Philippines	1
Qatar	1
Spain	1
Sweden	1
Switzerland	1
Tanzania	1
United Kingdom	4
Uruguay	1
USA	7

from the author), and also the complete process of arriving at the modified and consensus statements for each stage. This process will be described in full for the first 2 stages, and then summarized for the subsequent stages (the complete process is also available from the author).

## 1. Psychosocial Assessment

### *Responses to the First Questionnaire*

There was 71% agreement that psychosocial assessment was possible, and 100% agreement that the patient's full expectations should be recorded. There was 94% agreement that the patient's attitude toward the wearing of complete dentures should be recorded, and 74% agreement that the patient's self-image should be ascertained.

However, 76% said that the socioeconomic status would not influence the way they make complete dentures, and 74% said the patient's education level also would not have an effect. This result was a problem. A universal MAP could not possibly accommodate this attitude, and so it was necessary to re-explain the philosophy of appropriate tech. The respondents were asked to consider the statements in the second questionnaire not from the point of view of what they would do in a specialist practice, but what they would insist should be done at minimum by a general practitioner. Therefore, in the second round of statements, this aspect was made more explicit.

**Table 2** Stages in the Construction of Complete Dentures and the No. of Statements Per Stage Per Questionnaire

Stage	No. of statements per questionnaire		
	First	Second	Third
Psychosocial assessment	6	6	2
Ensuring a healthy mucosa prior to impression taking	3	2	3
Impressions	12	2	1
Arch relations	10	4	3
Appearance	6	3	2
Arch form	6	2	4
Posterior palatal seal (post dam)	6	2	1
Occlusion	8	3	4
Delivery (placement, fitting)	5	5	5
Recall	4	5	4
Replacement	9	8	2

Comments received from 14 of the respondents influenced the wording of the second round of statements.

### *Responses to the Second Questionnaire*

The responses regarding patients' expectations, attitudes, and self-image resulted in slight rewording of the statements to be more suitable for a MAP and to indicate that these should be ascertained and recorded before treatment. Ninety-two percent agreed that this should apply to the patient's full expectations, 97% agreed for the patient's attitude toward wearing complete dentures, and 79% agreed for the patient's self-image in terms of the loss of his or her teeth. The lower level of agreement for self-image was understandable in light of the variations and difficulties in attaining this information; one comment was, "I don't fully understand [this] myself."

There were 3 reworded and new statements. Ninety-five percent agreed that the patient's assessment of any existing prosthesis, as well as past experiences, should be recorded. One hundred percent agreed with the statement that summarized some of the first section's individual statements: "The patient's specific goals regarding expectations of comfort, function, and esthetics should be recorded prior to treatment."

### *Implications for a MAP*

It was considered legitimate to make the assumption (on the basis of the different levels of consensus) that

the patients' self-image in terms of the loss of their teeth is subsumed sufficiently within their overall attitudes, expectations, and experiences regarding complete dentures that recording these aspects will give the operator sufficient information to communicate with and treat the patient appropriately. Thus, the following statements emerged, having achieved a very high level ( $\geq 95\%$ ) of consensus:

- The patients' specific goals regarding expectations of comfort, function, and esthetics should be recorded prior to treatment
- The patient's experience, if any, with complete dentures and his or her self-assessment of any existing prosthesis should be recorded prior to treatment

### ***Responses to the Final Questionnaire***

Although there was 100% agreement in round 2 with the first of the above statements, in round 3, one person changed his or her mind! However, there was still a 97% agreement, and thus this statement was still included in the MAP, as was the second statement, which had 100% agreement.

## **2. Ensuring a Healthy Mucosa Prior to Impression Taking**

### ***Responses to the First Questionnaire***

Sixty-seven percent agreed that ensuring a healthy mucosa prior to impression taking is necessary. In terms of method, 87% said by means of tissue conditioners, 64% said by leaving the existing dentures out, 31% said both, 13% said leave the denture out but do not use tissue conditioners, and 30% said use tissue conditioners but do not leave the dentures out.

Therefore, there appeared to be agreement on the *value* of achieving a healthy mucosa, but not necessarily on *how*. This is acceptable for a MAP, because the essence of a MAP is not to dictate the methods, but to agree on the principles. Thus, this seemed a good principle to follow and worth including in a MAP.

Comments were received from 8 respondents, mostly advocating specific materials and methods.

### ***Responses to the Second Questionnaire***

The modified statement was, "it is preferable to ensure that there is a healthy mucosa prior to taking final impressions," and this received 100% agreement.

An additional statement was added as well: "If not present, a healthy mucosa can be achieved by a variety of methods, such as the use of tissue conditioners, leaving existing dentures out prior to taking final im-

pressions, and antifungal medicaments." Although this obtained a 97% level of agreement (only 1 'no'), there were several comments. The criticism was caused by insufficient flexibility: one respondent preferred the phrase "*usually* can be"; one felt the use of combinations of methods should be included in case one of the examples does not work; and one noted that advocacy of antifungals was dangerous in case it encouraged indiscriminate use, and that the option of leaving the dentures out is not going to be socially acceptable to all patients. Further, although there is evidence that these procedures will assist in producing a healthy mucosa, there is in fact little evidence that allowing for a "rebound" of the mucosa will either enhance or compromise the final result.

### ***Implications for a MAP***

Despite the above comments, the level of consensus was so high that these comments should not be seen as a detraction. Therefore, the following statements were formulated for final testing in the third round:

- It is preferable to ensure that there is a healthy mucosa prior to taking final impressions
- A healthy mucosa may usually be achieved using a combination of methods, such as the use of tissue conditioners, leaving the dentures out prior to impression taking, and adjustment of the existing dentures
- If candidosis is diagnosed and recorded, this should preferably be treated prior to impression taking

### ***Responses to the Final Questionnaire***

There was 100% agreement with the first of the above statements, and only 1 respondent disagreed with the second. One respondent (not the same) disagreed with the third statement, and another questioned the term *candidosis*, preferring instead the term *candidiasis*. Most medical dictionaries consulted by the author use these terms synonymously, but it was decided to substitute the term *candidal infection* to remove any confusion. With this change, all 3 statements could therefore be included in the MAP.

The process used to obtain the final statements for these 2 stages was similar for all remaining stages, for which the main issues of contention and final statements will now be discussed.

## **3. Impressions**

From the initial questionnaire, impression procedures, techniques, and materials emerged as contentious issues, as did any variance of procedure to suit socioeconomic conditions. This may have resulted from a prob-

lem of definition, as there is a similar lack of consensus in the literature.<sup>13,14</sup> Therefore, 2 statements that avoided the specifics of technique and materials were formulated.

First, the participants were asked the following question: "Would you accept, for the purposes of a MAP for complete dentures, the following definition: 'The final impression is an impression that records the entire area to be covered by the denture base and that provides for intimate tissue contact and border (peripheral) seal to prevent the ingress of air between the denture base and soft tissue.'" If the answer was yes, then participants were asked whether they agreed with the following: "The final impression can be made in a suitable material supported in a variety of ways, using, for example, a special tray, an existing denture, or another impression material in a stock tray such as compound or alginate, but always so the denture base shows evidence of careful conformity to the requirements of appropriate coverage, intimate tissue contact, and border (peripheral) seal." It was anticipated that if there was agreement for these 2 statements, then the latter part of the last statement could be formulated to be suitable for inclusion in a MAP.

There was 97% acceptance (1 no) of the definition of a final impression, and 95% (2 no's) acceptance of the statement referring to the manner in which the final impression can be made. Therefore, the following statement was formulated for inclusion in the MAP, and was agreed upon by all but 1 respondent:

- The final impression can be made in a material, supported in a variety of ways, which will allow the operator to achieve optimum conformity to the requirements of appropriate coverage, intimate tissue contact, and border (peripheral) seal

#### 4. Arch Relations

Many aspects of this procedure were detailed, such as marking the center line, the use of occlusal rims, coincidence of centric relation and centric occlusion, interocclusal space, and recording materials. Some practices known to be carried out by general dental practitioners<sup>15</sup> (Ndimande Z, unpublished data, 2001) and which are contrary to those advocated in the literature (such as not trimming occlusal rims at all) were also included.

After a series of reformulations, several statements of principles emerged, and the following statements achieved 100% agreement:

- The center line for the maxillary anterior teeth and the occlusal plane should be determined by the operator, and this information transferred by setting some teeth, and/or marking and adjusting an occlusal rim

- A method should be used to record the centric relation position at the desired vertical dimension of occlusion, such as an interocclusal recording material or by means of an intraoral tracing
- The vertical dimension of occlusion should allow for an interocclusal (freeway) space. This space should be sufficient for function, speech, and esthetics, and be appropriate to each patient

#### 5. Appearance

Although appearance is a subjective topic for both the patient and clinician, there were high levels of agreement with statements relating appearance to procedures, such as the use of vertical and horizontal overlap. There was less agreement on the responsibility for the arrangement of the teeth. After reformulating some statements, 2 issues remained contentious: customization of the tooth arrangement, and the involvement of the patient in the final decision of the appropriateness of the tooth arrangement. Final agreement was reached with the following statements for inclusion in the MAP, the first at 97% agreement and the second at 100% agreement:

- The arrangement of the anterior teeth should show evidence that the technician and clinician have taken into account a variety of factors to reconcile appearance with function, such as soft tissue profiles, phonetics, occlusal plane orientation, neutrality, and that the appearance is appropriate for that specific patient
- The patient should be part of the decision-making process regarding the appearance of the teeth, guided by the clinician

#### 6. Arch Form

Ninety-five percent of respondents to the initial questionnaire agreed that guidelines should be followed for positioning the teeth relative to the residual ridge, but there was no agreement on just what these guidelines should be. However, a statement to the effect that it is not important which guidelines are used as long as the arch form is in neutrality and will contribute to stability gained 90% approval. When these concepts were separated, only 2 respondents disagreed with relating arch form to neutrality, and there was 100% agreement that the arch form should contribute to stability in function and parafunction. However, there was some debate concerning parafunction and its definition in complete denture wearers, and so this term was removed from subsequent statements.

The following statements achieved 92% and 95% agreement, respectively, and were subsequently combined for the MAP:



- The arch form should show evidence that the clinician has arranged for the teeth to be in a position of neutrality to the available denture space and muscle forces
- The arch form should contribute to stability in function

## 7. Posterior Palatal Seal (Post Dam)

Statements for this stage related to methods, location, and whether a posterior palatal seal should be created at all. One respondent pointed out that it is impossible to know whether it is absolutely necessary and cited a study in which extensive reduction of palatal coverage did not significantly alter retention.<sup>16</sup> Others, however, argued that it is necessary to compensate for acrylic resin shrinkage during processing, and that the method was again less important than the principle. At one stage, there was 92% agreement that the base should show evidence that attention was paid to the anatomical placement of a posterior seal; however, it was again commented that the placement of a seal at an earlier stage might mean that there is no visible evidence of its presence after processing. Thus, it was clear that the value of this activity requires more definitive research, and this aspect of making complete dentures should not be included as part of a MAP.

## 8. Occlusion

Controversy and contention regarding issues relating to occlusion were expected, and indeed there was no agreement on issues such as excursive contacts, the occlusal form of the teeth, specific occlusal schemes, the relationship of centric relation to centric occlusion, and, once again, whether parafunction can be allowed.

Since these results were anticipated because of the lack of clear scientific evidence in the literature, an un-specific statement was also included in the first round, to which it was felt there would be a high level of agreement and that might represent a general philosophy that could be included in a MAP. This turned out to be true, with a 95% agreement for the statement: "It does not matter which type of teeth are used or which occlusal philosophy is used as long as the scheme chosen contributes to stability in function and parafunction." There was 100% agreement that there should be even contact on all posterior teeth in the intercuspal position.

In the history of complete denture construction, agreement on occlusal aspects of complete dentures has been consistently elusive. Thus, it was encouraging that after reformulating the statements, the respondents reached a high level of agreement. The following statements were therefore included in the MAP, with 100% agreement:

- The occlusal scheme should be clearly capable of contributing to the stability of dentures when in function
- The intercuspal position should enable the patient to return to this position during function without causing instability of the denture or disharmony with the muscles and joints
- There should be even contact of all posterior teeth in the intercuspal position (centric occlusion)

## 9. Delivery (Placement, Fitting)

There was a wide variation in responses to issues regarding delivery of the dentures, such as the need for a clinical remount, the fabrication of occlusal adjustments using intraoral marking paper/material, the use of a pressure-indicating material, and the need for a material to assist in indicating any border/peripheral overextensions.

A less prescriptive approach was adopted for subsequent rounds. There was 100% agreement that border/peripheral overextensions should be identified, and 100% agreement that the patient should receive instructions on hygiene and future visits. Occlusal adjustment remained controversial, but 94% agreement was reached that the occlusion should be finally adjusted according to observations made after processing, which captured the essence of the comments received and allowed for operator variation in conformity to this procedure.

## 10. Recall

Considering the lack of consensus regarding the procedures to be carried out at delivery, it was not surprising that there were mixed responses regarding the procedures required at recall. There was initially a 98% agreement that a recall visit should always be scheduled, and subsequently a 95% agreement that the denture-bearing mucosa should be examined. Several respondents mentioned experiences of observing mucosal irritation and even ulceration when the patient had *not* reported any complaints at that stage. It was clear, therefore, that the minimum procedure was to examine the mucosa, which, as one respondent pointed out, should mean the entire oral mucosa, not just the denture-bearing area. Only this statement from the recall stage was included in the MAP.

## 11. Replacement

Respondents were asked to suggest a time period for likely replacement that they would recommend to their patients, and the majority fell into the range of 5 to 10 years, which seems like a reasonable time frame to at least reassess the dentures and their need for replacement.

Original statements about the criteria for replacement were reworded to include the need to adjust the dentures, not just replace them, and 100% agreement was reached on the following issues: loss of vertical dimension, stability, and retention; loss of or reduced chewing ability as assessed by the patient; and dissatisfaction with appearance as assessed by the patient.

There was insufficient agreement that patients should be advised to have their dentures adjusted or replaced over any specific time period. As one responder commented, "I have a problem with the word adjusted. Dentures need to be replaced every 5 to 10 years. They are likely to need adjustment more frequently." Therefore, it was not possible to include a time factor into the MAP. In fact, the author's own experiences in a developing country are such that service conditions and availability normally militate against the routine use of a time frame, making patient-mediated decisions the norm.

## Discussion

The concept of appropriatech was unfamiliar to many of the respondents, as exemplified by their initial responses regarding whether the patient's socioeconomic or educational status would influence the way they make complete dentures. Most replied in the negative, but after further explanation, acceded to the possibility that a variety of materials and methods may be used during the construction of complete dentures, but that there should be a set of principles which, if not followed, may lead to inferior outcomes or even iatrogenic consequences. It was stressed that the goal was to develop international consensus on a minimum acceptable protocol—a MAP, in which the P could also stand for Principles. If the international leaders of prosthodontics could achieve such a protocol, this would be a guide not necessarily for *specialists*, but for general practitioners who work at the coalface helping the millions of people who need conventional complete dentures and who often have to make heroic adaptations to successfully wear poorly made prostheses.

The Delphi survey technique has never been used in dentistry to obtain consensus on clinical guidelines of this nature. Its reliability can therefore be questioned; however, evidence from technical forecasting suggested that if respondents are representative of an expert community, they are unlikely to produce results that would differ markedly from those of another group of respondents from the same community.<sup>7</sup> The fact that the respondents are indeed from an expert community increases the content validity of the Delphi technique, and the use of successive rounds increases concurrent validity.<sup>6</sup> The validity was further increased by the requirement of a 90% or better agreement, a level higher than has ever been reported in the literature.<sup>6</sup>

Development of guidelines in this manner is a means to generate consensus. In terms of the levels of evidence developed in evidence-based medicine,<sup>17</sup> expert opinion is level 5, the lowest. This is the main limitation of this study, but it is based on the limitation that the ideal of applying rigorous reviews of clinical trials is impossible if these trials either do not exist or are not ethically possible to carry out. This applies to almost all stages in the construction of complete dentures. However, there are some procedures that may lend themselves to clinical trials (such as the use of a posterior palatal seal), but thus far have been neglected. For these reasons, this study has tried to avoid the specific advocacy of procedures and materials, and by concentrating on principles, allows for variation in the application of materials and methods to those principles. Thus, it is felt that there is value in producing these consensus statements that comprise the final outcome of this study—a MAP for complete dentures. This is presented below, and contains the statements that have received 90% or greater consensus among the expert group of respondents. The statements have been grouped into 3 phases, and this MAP can now form the basis for assessing any procedures that deviate from as-taught, textbook convention in an attempt to reduce time and costs while still producing a quality service—in other words, that will conform to the philosophy of appropriatech.

## Guidelines for the Minimum Acceptable Protocol for the Construction of Conventional Complete Dentures

### Initial Preparatory Phase

- The patient's specific goals regarding expectations of comfort, function, and esthetics should be recorded prior to treatment
- The patient's experience, if any, with complete dentures and his or her self-assessment of any existing prosthesis should be recorded prior to treatment
- It is preferable to ensure that there is a healthy mucosa prior to taking final impressions
- A healthy mucosa usually may be achieved with a combination of methods, such as the use of tissue conditioners, leaving the dentures out prior to impression taking, and adjustment of the existing dentures
- If a candidal infection is diagnosed and recorded, this preferably should be treated prior to impression taking

### Treatment Phase

- The final impression can be made in a material, supported in a variety of ways, which will allow the operator to achieve optimum conformity to the require-

ments of appropriate coverage, intimate tissue contact, and border (peripheral) seal

- The center line for the maxillary anterior teeth and the occlusal plane should be determined by the operator, and this information transferred by setting some teeth and/or marking and adjusting an occlusal rim
- A method should be used to record the centric relation position at the desired vertical dimension of occlusion, such as an interocclusal recording material, or by means of an intraoral tracing
- The vertical dimension of occlusion should allow for an interocclusal (freeway) space. The amount of this space should be sufficient for function, speech, and esthetics, and be appropriate to each patient
- The arrangement of the anterior teeth should show evidence that the technician and clinician have taken into account a variety of factors to reconcile appearance with function, such as soft tissue profiles, phonetics, occlusal plane orientation, neutrality, and that the appearance is appropriate for that specific patient
- The patient should be part of the decision-making process for the appearance of the teeth, guided by the clinician
- The arch form should show that the clinician has arranged for the teeth to be in a position of neutrality to the available denture space and muscle forces, and should contribute to stability in function
- The occlusal scheme should be clearly capable of contributing to the stability of the dentures when in function
- There should be even contact on all posterior teeth in the intercuspal position (centric occlusion), which should enable the patient to return to this position during function without causing instability of the denture or disharmony with the muscles and joints
- The occlusion should be finally adjusted according to observations made after processing
- Attempts should be made to identify any possible border/peripheral overextensions and/or fitting surface discrepancies, either by observation or by the use of appropriate materials
- The patient should receive instructions on proper hygiene and the need for future visits

### **Posttreatment Phase**

- At recall, the mucosa should be checked, even if there are no complaints
- When assessing complete dentures for the need to make adjustments or to determine the need for replacement, the clinician should assess loss of vertical dimension, stability, retention, the patient's reported ability to chew to his or her satisfaction, and the patient's satisfaction with his or her appearance

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