



## FDI POLICY STATEMENT

### Malocclusion in Orthodontics and Oral Health

To Be Submitted for adoption by the FDI General Assembly: September 2019,  
San Francisco, USA

#### 1 **CONTEXT**

2 This policy statement highlights the relation between malocclusion in orthodontics and oral  
3 health, with special reference to the FDI's definition of oral health as "multi-faceted and  
4 includes the ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of  
5 emotions through facial expressions with confidence and without pain, discomfort and disease  
6 of the craniofacial complex"<sup>1</sup>.

7  
8 Not each malocclusion needs treatment. Indices such as the Index of Orthodontic  
9 Treatment Need (IOTN), the Dental Aesthetic Index (DAI) or others are used to determine  
10 the need or priority for orthodontic treatment, ranking from "no need or little need" to  
11 "essential treatment". In the latter, for example lip and/or palate cleft, malocclusion is a  
12 common health problem that may affect oral health by increasing dental caries prevalence,  
13 periodontitis, increasing risk for trauma and difficulties in masticating, swallowing, breathing  
14 and speaking<sup>3</sup>.

15  
16 Malocclusion may cause patients to feel uncomfortable about their dental and facial  
17 appearance during social interactions<sup>2</sup>. Many people seek orthodontic treatment for  
18 aesthetic improvement, not because of its positive impact on function, oral health, overall  
19 general health and well-being.

#### 20 **SCOPE**

21  
22  
23 This policy statement addresses the importance of orthodontic treatment as an integral part  
24 of dentistry for physiological, psychological, psychosocial, functional and dental reasons  
25 under strict consideration of the severity of the case, the respective individual impairment and  
26 the available resources.

#### 27 **DEFINITIONS**

28  
29  
30 **Malocclusion:** irregularity of the teeth or a mal-relationship of the dental arches beyond the  
31 range of what is accepted as normal<sup>4</sup>.

32  
33 **Index of Orthodontic Treatment Need (IOTN):** rating system used to assess the need and  
34 eligibility of children under 18 years of age for UK National Health Service (NHS) orthodontic  
35 treatment on dental health grounds, specifically designed to identify problems of  
36 malocclusion that affect oral health and are not cosmetic.

37

38 **Dental Aesthetic Index (DAI):** index that evaluates 10 occlusal characteristics: and has four  
39 stages of malocclusion severity: “no or slight treatment need, elective treatment, treatment  
40 highly desirable and treatment mandatory”<sup>6</sup>.

41

## 42 **PRINCIPLES**

43 By considering malocclusion not only as an aesthetic problem, orthodontic treatment can  
44 prevent and intercept further oral diseases and improve the quality of life.

45

## 46 **POLICY**

47 As orthodontics is an integral part of dentistry, FDI supports the following statements:

48 **1.** The interrelation of malocclusion, oral and general health should be taught in dental  
49 education such as malocclusion and periodontitis or caries and potential for traumatic  
50 damage of teeth and airway obstruction with all consequences.

51

52 **2.** After proper diagnosis, based on clinical and radiographic examination the dentist should  
53 inform the patient properly about the influence of malocclusion where it is of such severity  
54 that hygiene challenges may cause premature loss of teeth, or where function and/or  
55 aesthetics are seriously compromised.

56

57 **3.** The dentist/orthodontist should consider dental and medical histories, and the patient’s  
58 behavioral, psychological, anatomical, developmental and physiological limitations that  
59 may affect the treatment and prognosis of malocclusion.

60

61 **4.** The public should be informed that orthodontic treatment must be supervised under full  
62 responsibility of orthodontists or qualified dentists (dentists with relevant orthodontic  
63 education and suitable training).

64

65 **5.** The provision of “do it yourself” or “direct to consumer” orthodontic appliances, and where  
66 there is no direct interaction with orthodontists or qualified dentists, may have a significant  
67 adverse impact on patients’ oral health and must be proactively prevented.

68

69 **6.** Close cooperation with other health professions (e.g. nurses, paediatricians, speech  
70 therapists maxillo-facial-surgeons) may be necessary and will help to improve the treatment  
71 result and benefit for patients.

72

73 **7.** Public or private oral health insurance policies and third-party payers should acknowledge  
74 the need for and contribute financially to orthodontic treatment that is necessary in line  
75 with the FDI definition of oral health.

76

77 **8.** Further research on the relationship of malocclusion with oral health and general health  
78 should be undertaken.

79

80

## 81 **KEYWORDS**

82 Malocclusion, Oral Health, General Health, Orthodontic Treatment, Dental care, Third-Party  
83 Payers

84



85 **DISCLAIMER**

86 The information in this Policy Statement was based on the best scientific evidence available  
87 at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic  
88 constraints.

89

90 **References**

- 91 1. FDI World Dental Federation. FDI's definition of oral health [Internet]. Geneva: FDI  
92 World Dental Federation; 2016 [cited 15 January 2018].
- 93 2. Proffit W R, . Contemporary Orthodontics Edition[M]. Elsevier LTD, Oxford, 2013.
- 94 3. Mtaya M, Brudvik P, Astrom AN. Prevalence of malocclusion and its relationship with  
95 socio-demographic factors, dental caries and oral hygiene in 12 to 14 year old Tanzanian  
96 school children. Eur J Orthod 2009; 31: 467–476.
- 97 4. Jacobson, Alex. DAI: The dental aesthetic index. American Journal of Orthodontics and  
98 Dentofacial Orthopedics ,1987; Volume 92 , Issue 6 , 521 - 522