

Over the years we completely changed the composite aesthetics, first with **Enamel Plus HFO**, developed in cooperation with Prof. Lorenzo Vanini, and then with **Enamel Plus HRi**, the only composite with the same refractive index as natural enamel. Now we want to introduce on the market **Enamel Plus HRi Function**, the only composite with mechanical and functional characteristics that are identical to gold and similar to natural enamel.



AESTHETICS  
FUNCTION  
POSTURE



# ENAMEL<sup>plus</sup> HRI<sup>®</sup> Function

## STABILITY

The occlusal stability of the patient is the most precious benefit that the dentist must preserve or, in case of dysfunctions, recover. Nowadays all restorative materials have excellent aesthetic qualities and are comparable to each other, while we don't know much about their mechanical-functional features, above all in relation with occlusion.

The modern dentist must learn to choose the material most suitable for that specific clinical situation, not only according to aesthetic standards but also to the patient's functional and occlusal parameters

*Prof. Lorenzo Vanini & Prof. Camillo D'Arcangelo*



## WEAR COMPARATIVE ANALYSIS

after 120.000 cycles with chewing machine vs Zirconia

|  | Wear Depth (mm)                 | Volume Loss (mm <sup>3</sup> )    | Antagonist Wear (mm) |
|--|---------------------------------|-----------------------------------|----------------------|
| Enamel plus HRI UE2<br>Light Cured                                   | 0.485<br>(0.064) <sup>c</sup>   | 1.452<br>(0.245) <sup>d</sup>     | 0.010<br>(0.007)     |
| Composite F (enamel)<br>Light Cured                                  | 0.464<br>(0.069) <sup>c</sup>   | 0.972<br>(0.247) <sup>b,c,d</sup> | 0.004<br>(0.002)     |
| Enamel plus HRI Function EF3<br>Light Cured                          | 0.335<br>(0.069) <sup>b</sup>   | 0.529<br>(0.139) <sup>a,b,c</sup> | 0.006<br>(0.001)     |
| Enamel plus HRI UE2<br>Cured in light curing oven with heat          | 0.463<br>(0.063) <sup>c</sup>   | 1.016<br>(0.198) <sup>c,d</sup>   | 0.015<br>(0.013)     |
| Composite F (enamel)<br>Cured in light curing oven with heat         | 0.459<br>(0.068) <sup>c</sup>   | 1.017<br>(0.239) <sup>c,d</sup>   | 0.016<br>(0.017)     |
| Enamel plus HRI Function EF3<br>Cured in light curing oven with heat | 0.276<br>(0.058) <sup>a,b</sup> | 0.464<br>(0.191) <sup>a,b</sup>   | 0.016<br>(0.003)     |
| Pressed Ceramic  | 0.303<br>(0.065) <sup>a,b</sup> | 0.531<br>(0.143) <sup>a,b,c</sup> | 0.002<br>(0.002)     |
| Gold type III  | 0.219<br>(0.060) <sup>a</sup>   | 0.328<br>(0.140) <sup>a</sup>     | 0.004<br>(0.005)     |
| Human Enamel   | 0.216<br>(0.070) <sup>a</sup>   | 0.404<br>(0.200) <sup>a</sup>     | 0.013<br>(0.004)     |

(University of Chieti - Prof. Camillo D'Arcangelo)

The mouth is a part of the patient's postural system.  
The dentist must know and respect this system.

## BIOFUNCTIONAL DENTISTRY



# AESTHETICS > FUNCTION

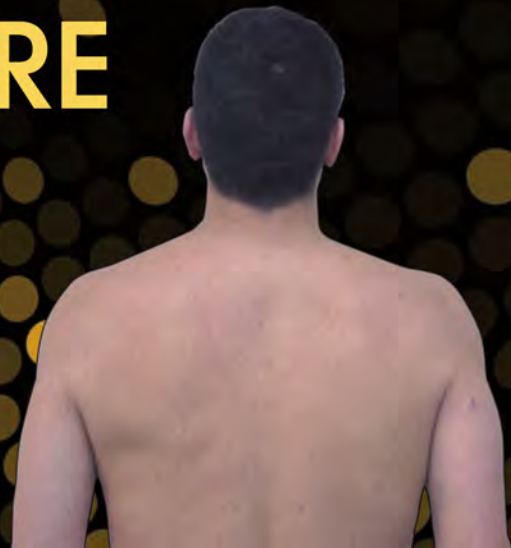
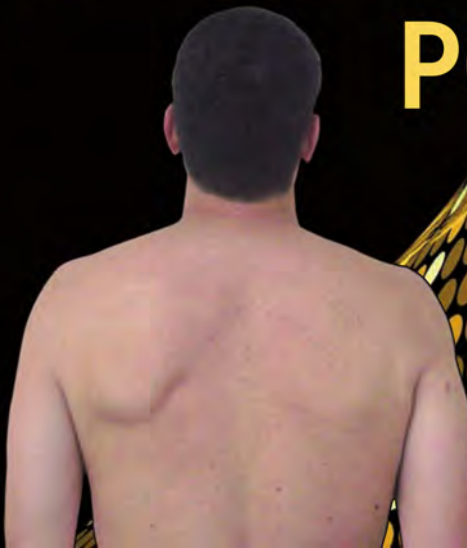
BEFORE



AFTER



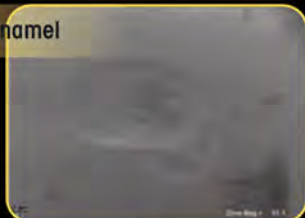
## POSTURE



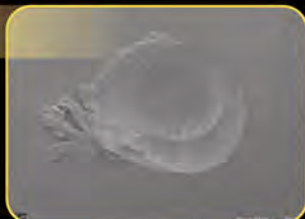
# WEAR FACETS

after 120.000 cycles with chewing machine  
(University of Chieti - Prof. Camillo D'Arcangelo)

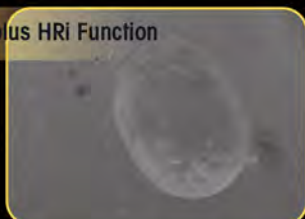
Natural enamel



Gold



Enamel plus HRi Function



F Composite



E Composite



WEAR FACETS AFTER 120.000 CYCLES

# ENAMEL<sup>plus</sup> HRi<sup>®</sup> Function

## PHYSICAL DATA

|                        |            |
|------------------------|------------|
| Vickers Hardness:      | 760 Mpa    |
| Flexural Strength:     | 150 Mpa    |
| Modulus of elasticity: | 11.500 Mpa |
| Compressive Strength:  | 460 Mpa    |

Enamel-composite system to restore the function in a micro-invasive way respecting the neuromuscular system and getting an excellent aesthetic integration. Enamel shades subject to low abrasion that are comparable to natural enamel. Ideal for use in posterior areas with direct or indirect technique and especially for prosthetic rehabilitations.





# ENAMEL<sup>plus</sup> HRI<sup>®</sup> Function



We completely changed  
the composite aesthetics  
NOW....

Let's change  
the occlusion therapy



CHR6FC

ENAMEL PLUS HRI FUNCTION TRIAL KIT  
including 6 syringes 2,5 g  
4 dentines: UD1, UD2, UD3, UD4  
1 universal enamel UE2  
1 "Function" enamel EF3

CR3FC

ENAMEL PLUS HRI FUNCTION KIT  
including 3 syringes 2,5 g  
3 "Function" enamels: EF1, EF2, EF3

CHR6FCT

ENAMEL PLUS HRI FUNCTION TRIAL KIT  
including 36 tips (6 tips x 6 shades)  
4 dentines: UD1, UD2, UD3, UD4  
1 universal enamel UE2  
1 "Function" enamel EF3

CR3FCT

ENAMEL PLUS HRI FUNCTION KIT  
including 18 tips (6 tips x 3 shades)  
3 "Function enamels": EF1, EF2, EF3

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