

The effect of Omega 3 Fatty acid and Bioactive Peptide supplementation on Salivary Interleukin-6 (IL-6) level among Malaysian Footballers – A secondary Analysis

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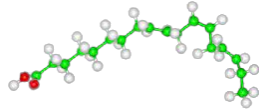


INTRODUCTION



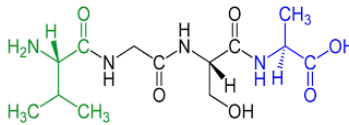
Interleukin-6 (IL-6)

- ✓ A multifunctional Cytokine
- ✓ Anti-inflammatory properties
- ✓ Pro-inflammatory role
- ✓ Stimulates immune response to infections
- ✓ Stimulates immune response to trauma



Omega 3 fatty acid

- ✓ Long chain PUFAs
- ✓ DHA & EPA
- ✓ Anti-inflammatory properties
- ✓ Anti-oxidative properties
- ✓ Reduce oxidative stress, swelling, pain



Bioactive peptide

- ✓ To suppress oxidation and inflammations.
- ✓ Potential substitute for synthetic pharmaceuticals
- ✓ No side effect as a drug

OBJECTIVE

To assess the effect of omega-3 fatty acid and bioactive peptide (peptAlde) supplementation on salivary and serum IL-6.

METHODOLOGY

Study Design

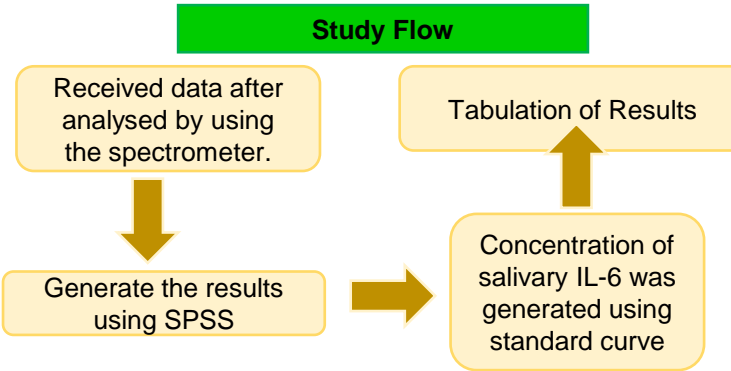
- Secondary data analysis
- Randomize control trial (RCT)

Study Population

- 52 Malaysian footballers

Statistical Analysis

- SPSS
- Repeated Measured ANOVA:
 - To compare different type of treatment on salivary IL-6.
- Pearson correlation coefficient test & scatter plot.
 - Correlation between salivary and serum IL-6 level



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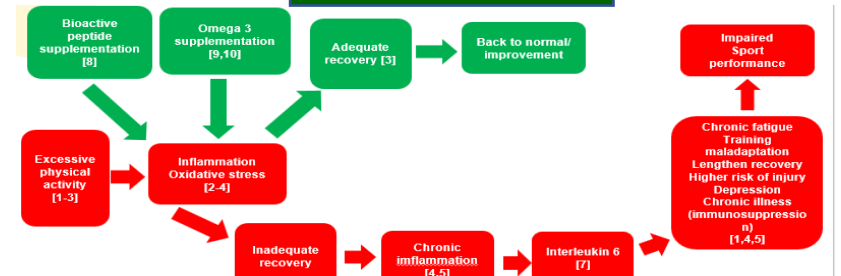
Types of Supplements

Group	Types of treatment	The dosage pf Supplementation
A	Placebo group (P)	Placebo capsules + Placebo bar
B	PeptAlde group (PA)	2 x 10g PeptAlde bar + placebo capsules
C	Omega 3 Fatty acid group (FO)	2.1g of omega 3 in 6 mini capsules + placebo bar
D	PeptAlde + Omega 3 Fatty Acids group (PA+FO)	2 x 10g PeptAlde bar +2.1g of omega 3 in 6 mini capsules.

RESULTS

- Mean of BMI for all the subjects are within normal range (18.5-24.9 kg/m²).
- There is an effect on the 4th and 8th weeks of supplementation (Placebo, omega-3 fatty acid, bioactive peptide (peptAlde), and omega 3 fatty acid + bioactive peptide) on the salivary IL-6 level among Malaysian footballers.
- However, there is no correlation between salivary IL-6 level and serum IL-6 level among Malaysian footballers.

DISCUSSION



CONCLUSION

In conclusion, this study showed that, the effect of 4 and 8 weeks of supplementation (Placebo, omega-3 fatty acid, bioactive peptide (peptAlde), and omega 3 fatty acid + bioactive peptide) on the salivary IL-6 level among Malaysian footballers. Moreover, there is no correlation between salivary IL-6 level and serum IL-6 level among Malaysian footballers. [7]

ACKNOWLEDGEMENT
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