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# Appendix (1)

**Serum malondialdhyde (MDA) concentrations (nmol/ml) in all different studies groups**

| Number of cases | Control Group (Group I) | | Vitamin-treated Group (Group II) | |
|---|---|---|---|---|
| | Before chemotherapy (n=20) | After chemotherapy (n=20) | Before chemotherapy (n=25) | After chemotherapy (n=25) |
| 1 | 8.819 | 12.673 | 11.448 | 6.551 |
| 2 | 12.67 | 14.714 | 12.714 | 8.795 |
| 3 | 7.979 | 11.653 | 9.612 | 4.285 |
| 4 | 5.122 | 10.632 | 10.69 | 7.979 |
| 5 | 10.836 | 15.0 | 6.714 | 3.714 |
| 6 | 9.612 | 14.918 | 10.87 | 6.142 |
| 7 | 10.857 | 14.102 | 12.67 | 8.367 |
| 8 | 13.0 | 14.918 | 8.816 | 4.285 |
| 9 | 10.408 | 13.734 | 12.673 | 12.285 |
| 10 | 14.408 | 16.183 | 7.571 | 3.897 |
| 11 | 14.489 | 12.857 | 10.877 | 6.551 |
| 12 | 12.489 | 16.142 | 12.265 | 8.367 |
| 13 | 8.102 | 14.06 | 12.897 | 8.918 |
| 14 | 10.04 | 12.061 | 11.653 | 8.163 |
| 15 | 12.673 | 10.285 | 9.224 | 5.938 |
| 16 | 14.489 | 12.653 | 9.408 | 7.183 |
| 17 | 12.061 | 12.865 | 10.632 | 5.938 |
| 18 | 9.653 | 12.011 | 10.02 | 7.979 |
| 19 | 8.102 | 10.523 | 11.32 | 8.698 |
| 20 | 8.795 | 9.92 | 9.225 | 6.836 |
| 21 | | | 11.874 | 9.6122 |
| 22 | | | 10.0 | 7.265 |
| 23 | | | 12.045 | 9.224 |
| 24 | | | 11.5 | 9.15 |
| 25 | | | 12.3 | 8.71 |

# Appendix (2)

**Serum carbonyl protein (CP) concentration ($\mu M^{-1}cm^{-1}$) in all different studies groups**

| | Control Group (Group I) | | Vitamin-treated Group (Group II) | |
|---|---|---|---|---|
| Number of cases | Before chemotherapy (n=20) | After chemotherapy (n=20) | Before chemotherapy (n=25) | After chemotherapy (n=25) |
| 1 | 16.745 | 5.836 | 15.927 | 9.854 |
| 2 | 15.836 | 19.65 | 16.927 | 11.29 |
| 3 | 17.545 | 25.127 | 16.309 | 9.618 |
| 4 | 14.381 | 34.909 | 16.381 | 11.49 |
| 5 | 16.018 | 31.29 | 14.4 | 7.454 |
| 6 | 13.781 | 33.672 | 16.545 | 9.472 |
| 7 | 14.963 | 19.636 | 15.872 | 13.29 |
| 8 | 13.29 | 26.036 | 13.472 | 9.472 |
| 9 | 16.927 | 27.654 | 15.49 | 10.909 |
| 10 | 14.49 | 31.29 | 16.945 | 14.58 |
| 11 | 13.4 | 24.018 | 15.854 | 9.654 |
| 12 | 15.618 | 24.127 | 13.818 | 8.48 |
| 13 | 17.109 | 28.49 | 16.781 | 13.29 |
| 14 | 15.963 | 31.54 | 17.145 | 13.472 |
| 15 | 16.8 | 27.654 | 15.909 | 9.836 |
| 16 | 16.8 | 24.381 | 14.145 | 9.145 |
| 17 | 15.872 | 28.381 | 16.727 | 13.49 |
| 18 | 14.52 | 27.12 | 6.745 | 13.09 |
| 19 | 12.021 | 25.012 | 15.924 | 9.836 |
| 20 | 10.3 | 16.9 | 16.2 | 11.272 |
| 21 | | | 14.145 | 8.181 |
| 22 | | | 16.745 | 11.436 |
| 23 | | | 15.7 | 12.4 |
| 24 | | | 16.3 | 13.9 |
| 25 | | | 13.8 | 9.7 |

# Appendix (3)

**The total antioxidant capacity (ug/ml) in different studies groups**

| | Control Group (Group I) | | Vitamin-treated Group (Group II) | |
|---|---|---|---|---|
| Number of cases | Before chemotherapy (Group Ia) (n=20) | After chemotherapy (n=20) | Before chemotherapy (n=25) | After chemotherapy (n=25) |
| 1 | 0.98 | 0.854 | 0.933 | 1.918 |
| 2 | 0.985 | 0.856 | 1.72 | 2.5 |
| 3 | 1.002 | 0.654 | 1.81 | 2.76 |
| 4 | 1.2 | 0.632 | 1.23 | 1.429 |
| 5 | 0.985 | 0.521 | 1.43 | 2.105 |
| 6 | 0.935 | 0.785 | 1.373 | 2.364 |
| 7 | 1.325 | 0.846 | 1.302 | 2.075 |
| 8 | 1.523 | 0.528 | 2.137 | 2.804 |
| 9 | 1.231 | 0.698 | 1.92 | 1.431 |
| 10 | 1.256 | 0.541 | 1.2 | 2.364 |
| 11 | 0.854 | 0.879 | 1.21 | 1.702 |
| 12 | 1.652 | 1.002 | 0.973 | 1.644 |
| 13 | 1.023 | 0.658 | 1.017 | 2.364 |
| 14 | 1.654 | 0.209 | 1.0172 | 2.102 |
| 15 | 0.254 | 1.589 | 0.182 | 2.768 |
| 16 | 0.897 | 0.98 | 1.381 | 1.871 |
| 17 | 1.987 | 1.003 | 1.973 | 2.831 |
| 18 | 1.532 | 0.589 | 2.275 | 3.426 |
| 19 | 0.954 | 0.79 | 1.918 | 1.918 |
| 20 | 0.97 | 0.73 | 1.05 | 1.12 |
| 21 | | | 1.11 | 1.91 |
| 22 | | | 0.76 | 1.77 |
| 23 | | | 0.809 | 1.34 |
| 24 | | | 1.25 | 2.12 |
| 25 | | | 1.03 | 2.56 |

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# دور الامداد بفيتامينات أ وهـ فى التوازن الأوكسيدى فى مريضات سرطان الثدى

رسالة مقدمة

بقسم كمياء طبية تطبقية / معهد البحوث الطبية –جامعة الإسكندرية

ضمن متطلبات درجة

**الماجستير**

**فى**

**الكيمياء الطبية التطبيقية**

**من**

**فردوس خميس مصطفى**

بكالوريوس علوم ٢٠٠٤

معهد البحوث الطبية
جامعة الإسكندرية
٢٠١٤

# دور الامداد بفيتامينات أ وهـ فى التوازن الأوكسيدى فى مريضات سرطان الثدى

**مقدمة من**

**فردوس خميس مصطفى**

بكالوريوس علوم (كيمياء- كيمياء حيوية )- جامعة الإسكندرية ٢٠٠٤
دبلوم كيمياء حيوية –جامعة الإسكندرية ٢٠٠٦

**للحصول على درجة**

**الماجستير**

**فى**

**الكيمياء الطبية التطبيقية**

**لجنة المناقشة والحكم على الرسالة** **موافقون**

**الأستاذة الدكتورة /** ----------

أستاذ

معهد البحوث الطبية

جامعة الإسكندرية

**لجنة الإشراف** **موافقون**

**الأستاذة الدكتورة / ميرفت عبد الفتاح الطوخى** ----------

أستاذ متفرغ بقسم الكيمياء الطبية التطبيقية

معهد البحوث الطبية

جامعة الإسكندرية

**الدكتور / محمد أحمد عبد المحسن** ----------

أستاذ مساعد بقسم الكيمياء الطبية التطبيقية

معهد البحوث الطبية

جامعة الإسكندرية

**الدكتور / ياسر مصطفى القرم** ----------

أستاذ بقسم علاج وأبحاث الأورام

معهد البحوث الطبية

جامعة الإسكندرية

**الدكتورة / نفين عبد المنعم حسين** ----------

مدرس بقسم الكيمياء الطبية التطبيقية

معهد البحوث الطبية

جامعة الإسكندرية